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ABSTRACT

Small rural school districts constitute a major portion of the public elementary and secondary sector of education. Using information from the Common Core of Data, this report focuses on the approximately 4,000 small rural school districts operating since 1986-87; their status in 1993-94; and how they changed each year during that 7-year period, drawing comparisons where appropriate to larger districts and districts in urban and suburban settings. In this report, a small district is defined as one that has less than 25 students per elementary grade and less than 100 students per secondary grade. Chapters cover the following: (1) data sources and definitions of terms; (2) enrollment size and location of small rural districts, district grade-level types, school district consolidation, and enrollment trends; (3) school characteristics (number of schools per district, school size, grade span configuration, ungraded instruction, kindergarten and prekindergarten, and school closings); (4) student characteristics (minority groups, limited English proficiency, special education, and poverty); and (5) per-pupil revenues and expenditures and student-teacher ratios. Appendices include extensive data tables and technical notes. Contains 30 references and statistical figures. (SV)

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Characteristics of Small and Rural School Districts

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Statistical Analysis Report

May 1997

Characteristics of Small and Rural School Districts

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Characteristics of Small and Rural School Districts

Executive Summary

Overview

All public school districts in the country provide basic information to the Common Core of Data (CCD), whose files are maintained by the National Center for Education Statistics. This report makes use of CCD to examine the status of small rural school districts in 1993-94 and the processes of change in those districts over the period from 1986-87 to 1993-94.

Small rural districts constitute a major portion of the public elementary and secondary sector of education. In 1993-94, half of the 15,000 regular public school districts in America were rural, and the majority of these were small, averaging fewer than 100 students per high school grade and 25 students per elementary grade (figure 2.1 in the report). One-fourth of the districts in the nation were small and rural, and in the Midwest, South Central, and West, this proportion was more than one-third (table A2.3a). However, only one in every 40 students in the nation attended schools in small rural districts. The majority of small rural districts, like other districts, were unified (K-12) districts, but one-third were separate elementary or secondary districts (table A2.1).

Small rural districts are declining in numbers, however. Between 1986-87 and 1993-94, the number of regular public school districts in the nation decreased by 700, and 415 of these were small rural districts, whose enrollments were folded into adjacent districts (figure 2.8). This represented a net loss of 1 in 11 small rural districts in this period. Closures of small rural districts were most prevalent in the Midwest (figure 2.9); and most small rural district closures were elementary (K-8) districts (table A2.1). Contrasted with the declining numbers of districts, total enrollment increased slightly in small rural districts (figure 2.10). As a result, in small rural districts that were in existence all 8 years, the average enrollment grew by 9 percent between 1986-87 and 1993-94.

Schools in Small Rural Districts

In 1993-94, about 8,000 of the nation's 84,000 public schools were located in small rural districts (figure 3.1). Most small rural elementary districts operated a single school, while small rural secondary and unified districts usually had 2 or 3 schools (figure 3.3). Rural schools are generally small. High schools in four-fifths of all rural districts had fewer than 100 students per grade (table 3.1). Some of the schools in small rural districts were very small: a fifth of the schools in small rural districts had fewer than one teacher per grade (figure 3.4), including 64 percent of the elementary schools (figure 3.5). There were relatively few intermediate schools and many combined (K-12) schools in these districts (figure 3.7). About a quarter of the schools serving primary grades offered prekindergarten, similar to findings in other types of districts

(figure 3.8). Finally, relatively few small rural districts either offered ungraded instruction or operated alternative, vocational, or special education schools (figure 3.9).

Between 1986-87 and 1993-94, about 415 schools closed their doors as the small rural districts in which they operated closed, and 315 more were assimilated into consolidated districts. Even in small rural districts that continued to operate, there was a net closure of 92 schools. There was a tendency for small rural districts to add intermediate schools, but there was a net loss of separate elementary and high schools in these districts (figure 3.13). The number of schools in small rural districts enrolling prekindergarten students more than doubled during this period (figure 3.14), while the number offering ungraded instruction declined (figure 3.15).

Students in Small Rural Districts

In 1993-94, about 1,100,000 of the nation's 43,200,000 public school students were enrolled in small rural districts. More of the students in small rural districts were either white or Native American than elsewhere, while fewer were Asian or African American (table 4.1). Few school-aged children in small or rural districts (1.3 percent) were reported as having limited English proficiency (figure 4.6); however, slightly more of the students in small rural districts than elsewhere were reported to have Individualized Education Programs (IEPs) to address special educational needs (11.5 percent) (figure 4.7). In the South and West, but not in other regions, relatively more of the children in small rural districts were living in poverty (table 4.8).

During the latter part of the period from 1986-87 to 1993-94, enrollments increased in small rural districts, although not as fast as elsewhere. Although percentages of minority enrollment increased by 10 percent overall (from 31 percent to 34 percent of all public school students), they remained virtually constant in small rural districts, at about 12 percent (table A4.1b). While the percentage of Native Americans in small rural districts grew, the percentages of Asians and African Americans in these districts declined (figure 4.11). Finally, from 1987-88 to 1993-94, there was a gradual increase in the proportion of students with Individualized Education Programs (IEPs) in small rural districts, as well as in other types of districts (figure 4.12).

Revenue and Expenditures in Small Rural Districts

In the nation as a whole, there were no substantial discrepancies in per-pupil revenues and expenditures between small rural districts and other districts; however, revenues and expenditures were substantially lower in large rural districts. In 1992-93, revenue per pupil in small rural districts was about $6,200, and expenditures per pupil were about $6,000. This was about $200 to $400 more than in large nonrural districts (figures 5.1, 5.2). However, per-pupil revenue and expenditures were only about $5,200 in large rural districts. Per-pupil spending varied substantially between regions: most notably in the West, where small rural districts spent nearly $2,000 more per pupil more than other districts did (table 5.1).

Nearly half the revenue in small rural districts came, each, from local and state sources, with about 7 percent from the federal government (figure 5.5). In large rural districts, by comparison, a much smaller share came from local sources. About two-thirds of the current expenditures in small rural districts were for core instruction, slightly less than elsewhere (figure 5.6). Nevertheless, ratios of students to teachers were lowest in small rural districts, ranging from 12 in top quartile spending districts to 15 in bottom quartile spending districts (figure 5.9).

Adjusted for inflation, finance trends between 1989-90 and 1992-93 were minor, although there were a few patterns. The slightly greater spending in small rural districts, compared to other districts in 1992-93, was more noticeable than it was 3 years earlier (figure 5.11). In the South Central region, per-pupil revenues in small rural districts rose, but in the Northeast, per-pupil expenditures declined somewhat (table 5.3). In the nation as a whole, however, no substantial trends in per-pupil revenue or expenditures or in student/teacher ratios characterized small rural districts.

1. Introduction

While most of the population of the United States lives in urban settings, millions of citizens live in vast rural areas. This diversity has important implications for public schooling, not only in terms of goals of schools and characteristics of the community but also in terms of logistics. School districts must serve a sufficiently large population to obtain funding to enable purchasing of resources, hiring teachers, and offering a range of courses and services. However, when the population is widely dispersed, districts face problems with keeping the community involved, transporting students over great distance, and maintaining small schools.

Using accepted, common sense definitions of "small enrollment" and "rural setting,"[1] more than 1 in 4 of the 14,648 regular public elementary and secondary school districts in the United States were small districts in rural settings in the 1993-94 school year,[2] although only 1 in 40 of the nation's 43 million public school students attended schools in these districts. In order to provide information on the characteristics of this substantial segment of American education, the National Center for Education Statistics (NCES) has developed this summary report, based on information about small rural districts contained in the Common Core of Data. This report focuses on the 4,000 small rural districts operating since 1986-87, their status in 1993-94, and how they changed each year from 1986-87 to 1993-94, drawing comparisons where appropriate to larger districts and districts in nonrural (urban and suburban) settings.

Four sections summarize information concerning, respectively, (1) the geographic distribution of small rural districts, (2) the characteristics of schools in these districts, (3) the characteristics of students in these districts, and (4) revenues and expenditures in these districts. The first section focuses on the district as a unit and presents information on such matters as the total numbers of small rural districts, where they are located, how many students are enrolled, and their rate of closure and consolidation.

The second section focuses on schools in small rural districts, how many schools are in each district, how small they are, what grade levels they serve, and how many of them were closed between 1986-87 and 1993-94.

---

[1] The standard NCES definition of "rural," based on Census-defined locales of schools in a district, was used; and "small" districts were those with enrollment averaging fewer than 25 students per elementary grade and fewer than 100 students per secondary grade served, in 1987-88 or the first year of operation if that was later than 1987-88.

[2] There were additional school districts on the CCD file, not included in this report. However, they were either non-regular school districts or districts with no students. In 1993-94, for example, 1,717 districts were excluded for this report. Of these, 5 were in outlying territories (enrolling an aggregate 707,507 students); and the remainder either enrolled no students (330), were nonregular (409), or both (956), or had undefined grade spans (17). Although there are no definitive data on which nonregular districts were rural, of 409 nonregular districts, such as regional units or administrative components of supervisory unions, enrolling 165,322 students, 201, enrolling 37,724 students, were not in Metropolitan Statistical Areas.

The third section looks at the students attending schools in small rural districts. The focus in this section is on racial and ethnic distributions, percentages of Limited English Proficient (LEP) children and students with Individualized Education Programs (IEPs) under the Individuals with Disabilities Education Act (IDEA), and percentages of children in poverty.

Finally, in the fourth section the focus is on revenues and expenditures: their sources, how they are used, and their translation into student/teacher ratios.

Full tabulations of means and percentages are shown in 45 tables in appendix A. The tables are numbered according to the chapter in the report in which their contents are discussed.

Data Sources

The primary sources of data for these analyses are the NCES Common Core of Data (CCD) School and Education Agency Surveys for the years 1986-87 to 1993-94. These data were merged with the decennial 1990 U.S. Census information mapped to school district boundaries (the School District Data Book) and the Bureau of Census F-33 Survey of Local Governments for the years 1989-90 to 1992-93. CCD data were edited to create a consistent longitudinal file for this report, and missing data in these files were imputed. For districts whose CCD records were missing one or more fields in a year or had unreasonable values based on comparisons to other years or other fields, values were imputed statistically. In most cases, these imputations were based on the districts' responses in other years. Details of this process are described in Appendix B.

Definitions of Terms

A common definitional framework is needed for discussions about schools in rural areas. Past studies have used several alternative units of analysis to discuss public education in rural areas, most commonly schools, school districts, or counties. Although schools are the final delivery point for education and counties are a relatively stable government whose boundaries do not overlap, the school district is the primary unit of concern in most educational policy matters (Stephens 1988). School districts are local,[3] relatively stable over time, and the agencies most directly responsible to the citizens of the community for educating its children. They are the basic unit selected for attention in this report.

It is important to note that focusing on small rural districts is not the same as looking at small schools in rural settings. In this report, a district's "ruralness" depends on the proportion of its schools that are in rural locales. Thus, a small school located in a rural section of a large district with some urban areas would not be included in this report. For example, in 1993-94, there were approximately 9,500 small rural *schools* in the United States, but only about 6,000 of these schools were in small rural *districts*. Rural *districts* are also different from rural *counties*: although there are

[3] Regular public school districts divide the nation into about 14,000 generally nonoverlapping areas. In some cases, however, separate elementary and secondary districts serve the same community.

many countywide districts in the nation, only about 100 of the 4,000 small rural districts are countywide districts.

Definition of Rural School Districts. The meaningfulness of the findings in this report depends on where the line is drawn between "rural" and "nonrural" school districts. If "rural" is defined too broadly, then it becomes a diffuse concept including all but the districts in metropolitan areas. If defined too narrowly, it may omit districts which a consensus would agree are rural. A categorization is needed which will bring the differences between rural and nonrural districts into sharp focus.

Before 1900, when the United States was mainly an agrarian society, "rural" simply meant a farming community. At that time, most of the population attended rural schools. But by 1918, the urban population had exceeded that of the population in rural areas, and it became important to attend to the educational problems facing rural communities. However, it also became clear that there was no single "rural" school district type (Stern 1994). In its decennial survey, the Census Bureau has defined "rural" as a residual category of *places* "outside urbanized areas in open country, or in communities with less than 2,500 inhabitants," or where the population density is "less than 1,000 inhabitants per square mile." The data used for the CCD categorization of school locales are based on the 1980 Census.

NCES has applied this concept of a rural setting to individual schools, based on the addresses of the schools. In this report, a school district is defined as rural based on the locale codes (see Appendix B) assigned to the schools operated by the district. Essentially, according to NCES's standard definition, a school district is called rural if that is the most common school locale; that is, if more schools in the district were located in rural locales than in any of the other six categories of locale (small and large towns, mid-size and large central cities, and fringes of mid-size and large cities). By this definition, in 1993-94, 45 percent of the nation's regular public school districts were rural. If districts with small town locales had been added to the set, 73 percent of all districts would have been included. To avoid diffusion of the concept of rural districts, small town districts were not considered rural in this report.

Definition of Small School Districts. The meaningfulness of the findings in this report also depends on where the line is drawn between "small" districts and districts that are not to be considered small. Although the size of the geographic area served by a school district imposes constraints on the services to that must be provided, the single measure of size that is most relevant to district operation is enrollment, or membership. In 1993-94, the median enrollment in regular public school districts was 1,000 students, and one quarter of the districts had fewer than 350 students. Because the purpose of this report is to focus on small rural districts, not all rural districts, a criterion threshold for enrollment that distinguishes districts whose smallness creates constraints on operation is needed.

Total enrollment does not provide the best indicator of being small because some districts serve only elementary or only secondary grades. A K-6 district that serves 350 students might not be considered small, because it has 50 students at each grade level and even as few as 20 or 30 are sufficient to make maximal use of an elementary school teacher. However, a K-12 district with 500

students might be considered small because it would have only about 40 students in each high school grade, too few to offer a sufficiently broad range of course choices. Conant (1959) developed a widely accepted criterion that the size of the graduating class in a high school should be at least 100 to support a quality educational program.

In this report, a small district is defined as one having fewer students in membership than the sum of (a) 25 students per grade in the elementary grades it offers (usually K-8) and (b) 100 students per grade in the secondary grades it offers (usually 9-12). Therefore, a district's classification as "small" depends upon both the total number of students it serves and the grade levels it offers. Many comparisons in this report are made between districts that are small and ones that are not small. In those cases, the term "large" is sometimes used. However, it should be made clear that when the term "large" is applied to school districts in this report, it is an abbreviation for "not small."

In 1993-94, as shown by the counts in table A2.1 in appendix A, 54 percent of the 3,334 elementary districts in the nation were small by this definition of "small," compared to 41 percent of the 631 secondary districts and 28 percent of the 10,638 unified districts. Among rural districts, 60 percent were small.

This definition of "small" is meaningful in terms of staffing constraints faced by districts, but it is somewhat skewed for unified districts because, although the threshold is different for elementary and secondary grades, actual enrollments within a district tend to be similar for all grades. Unified (usually K-12) districts are defined as small, as are other districts, by the comparison of their total enrollment to the sum of 25 per elementary grade and 100 per secondary grade; this creates a threshold for definition of a K-12 district as "small" of 625 in total enrollment, or about 50 students per grade. A unified district with 780 students, which would be expected to have about 60 students per grade, would *not* be defined as small, although its high school enrollment, taken separately, might well be fewer than 100 per grade. For purposes that would focus on the secondary grade criterion for "smallness," a parallel set of analyses were also carried out with an expanded definition of "small" that included all unified districts with fewer than 100 students per secondary grade (9-12). In 1993-94, 50 percent of the nation's unified districts were small by this definition; and among all rural districts, 80 percent were small. The results are summarized in Appendix B.

In addition, in several states, especially in the southeastern region of the country, all of the small rural schools have been consolidated into large, in many cases countywide, districts. Using the primary definitions for rural and small, although more than a quarter of the districts in Alabama, Delaware, Louisiana, Maryland, North Carolina, and West Virginia are rural, there are no *small* rural school districts in these states. These small schools in large rural districts are, by definition, not included in the picture of small rural districts, although they face many of the same challenges that schools in small rural districts do. To broaden the picture of small rural public education in America, analyses of small rural districts for this report were repeated including "large rural districts with a majority of small schools" along with small rural districts. Although this resulted in virtually no qualitative changes in the statements in the report, footnotes indicating differences appear at the end of each chapter.

Regions. For the purposes of this report, some results are presented for separate regions of the United States. The standard four-region breakdown used by the National Center for Education Statistics has been altered to reflect unusual state-by-state diversity in the southern region: three states, Texas, Arkansas, and Oklahoma, are presented as a separate "south central" region. In 1993-94, these three states had 815 small rural districts, compared to a total of 16 in the thirteen other states in the standard southern region. Because it would be misleading to label results based almost entirely on those three states as referring to the entire southern region, a five-region categorization is used. The state-by-state regional categorization is specified in Appendix B.

Longitudinal Measurement. There was attrition of roughly 1 percent of the regular public school districts each year between 1986-87 and 1993-94, so that in any year about 99 percent of the public school districts were the same ones that existed in the preceding year. Therefore, the CCD universe file can be used for longitudinal studies of the ways in which individual districts changed from year to year. However, the possibility of ambiguity arises when housing developments move into formerly rural areas and enrollments rise above the threshold for defining "small," or when an exodus of families seeking new jobs causes a district to become small. A choice must be made whether (a) to report the progress of districts once called small and rural or (b) to report on the characteristics of districts that are small and rural each year.

Viewing the progress of districts defined once as small and rural leads to different conclusions from those that follow from a cross-sectional view. For example, if we wish to determine whether enrollment increased or decreased in small rural districts over time, the trend would be hidden if those districts that crossed the threshold from "small" to "not small" when they gained students were, as a result, not counted in the enrollments in small districts after that. Trends in school closures, in revenues and expenditures per student, and in student/teacher ratios would be similarly distorted if districts that were counted as small and rural in one year were counted as nonrural or nonsmall in another year.

Although cross-sectional counts are also valuable, many questions about change cannot be addressed without a constant classification of the units of analysis. In order to provide an unambiguous definition for the examination of changes in small rural school districts over time, each district in the data set was defined once as small and rural, using locale in 1990 and enrollment and grade span in 1987-88 (or in a few cases, in the first year of its existence). In this way, trends in small rural district characteristics are descriptive of events occurring in those districts. For example, the finding (see chapter 2) that the net loss of small rural districts during this period was greatest in the Midwest is a meaningful description of district closures because none of this net loss can be attributed to the growth of districts out of the small category in the Midwest.

There were many consolidations of small rural districts during the period; and as a result, there was a net loss of 415 small rural districts between 1986-87 and 1993-94. Therefore, the specific districts included in tables in this report differ over the years. As described in appendix B, an attempt was made to link closing districts to the districts with which they merged, based on geographic location and enrollment changes. Although this attempt was only partially successful, it was clear that nearly all regular districts added to the CCD file between 1986-87 and 1993-94 were created from the consolidations of other districts; that is, they were not really "new" districts. Only

a handful of "new" districts were created through splitting of previously existing districts. As a result, virtually the only discrepancies from a fully longitudinal study of a single sample of small rural districts are the few cases in which two small rural districts might merge into a single, new district that is not small.

2. Small Public School Districts in America's Rural Locales

In 1993-94, half of the regular public school districts in America were rural, and the majority of these were small, with a total enrollment of fewer than 100 students per high school grade and 25 students per elementary grade (figure 2.1). One-fourth of the districts in the nation were small and rural, and in the Midwest, South Central, and West, more than one-third were (table A2.3a). However, only one student in forty in the nation attended schools in small rural districts. The majority of small rural districts, like other districts, were unified (K-12) districts, but one-third were separate elementary or secondary districts (table A2.1).

Between 1986-87 and 1993-94, the number of regular public school districts in the nation declined by 700, and most closures were small rural districts (figure 2.7). Among small rural districts, 1 in 9 closed during this period. However, due to the creation of some new districts out of consolidations, the net loss was 415 districts, or 1 in 11 (figure 2.8). Closures of small rural districts were most prevalent in the Midwest (figure 2.9); and most small rural district closures were elementary (K-8) districts (table A2.1). Contrasted with the declining numbers of districts, total enrollment increased slightly in small rural districts (figure 2.10). As a result, focusing only on districts that were in existence all 8 years, the average surviving small rural district had 9 percent more students in 1993-94 than it had in 1986-87.

Background

While the majority of public elementary and secondary schools experienced declining enrollments during the 1970s and early 1980s, rural schools, already serving small numbers of pupils, experienced the greatest percentage reduction of enrollment (Salmon 1990). In many districts, the decline in enrollment was sufficient to require closure or consolidation. In the last half of the 1980s, rural schools and the districts in which they were located continued to decline in numbers, as well as in enrollment. In this chapter, a picture of the status of small rural districts in America in 1993-94 is presented, including geographic information and the age categories of students served (elementary, serving children roughly from 4 to 13, secondary, serving children roughly from 13 to 18, or combined). Following the status picture, a description of trends over the 7 years leading up to 1993-94 is presented.

Small Rural Districts in 1993-94

Nearly half (46 percent) of the 14,648 regular public school districts in America were located in rural areas in 1993-94;[4] and more than 60 percent of rural districts were small. Thus, there were 4,238 small rural districts in the country (table A2.1).[5] As shown in figure 2.1, there were also 814 small districts in nonrural areas, but these constituted only 11 percent of all nonrural districts. Clearly, it is primarily in rural areas that one finds small school districts in America. In towns and cities, where people could make a choice to form large districts or split their schools into small districts, they rarely opted for small districts.

Small rural districts are found in many states, but their concentration is much greater in some regions than in others, as shown in Figure 2.2. Nearly half (47 percent) of the 4,238 small rural districts were located in the Midwest in 1993-94,[6] where 36 percent of all school districts were small and rural. Similar percentages of school districts in the South Central (43 percent) and West (35 percent) were small rural districts, but a smaller percentage of districts were small and rural in the Northeast (14 percent), where population density is greatest; and in the Southeast, where the majority of rural districts were large, only 16 (1 percent of all districts in the region) were small and rural. There were five states in which two-thirds or more of the districts were both small and rural: North Dakota (87 percent), South Dakota (75 percent), Montana (75 percent), Nebraska (71 percent), and Alaska (67 percent). Percentages for all states are presented in table A2.4b in appendix A.

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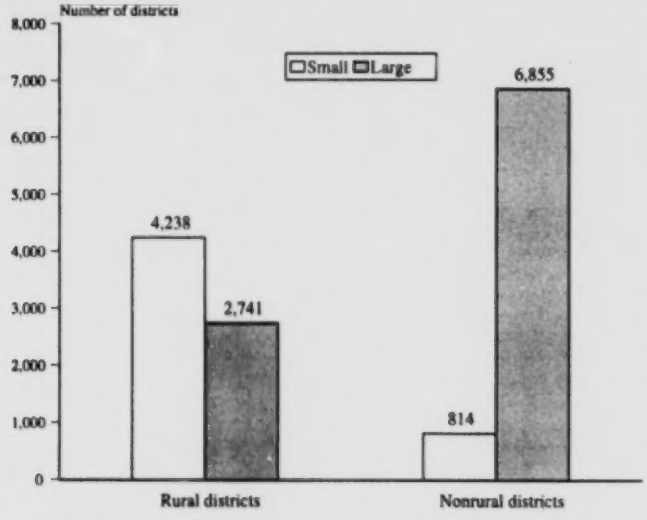
[4] The analyses include regular public school districts only. Thirty-three districts that did not specify their grade ranges in any year are excluded from analyses.

[5] For a discussion of how size and location of schools districts are defined, see chapter 1. Briefly, rural status is based on the modal Common Core of Data and U.S. Census classifications of locales of schools in district; and smallness is based on a total enrollment of fewer than 25 students per elementary grade and 100 students per secondary grade.

[6] Counts of small rural and other districts by region are shown in table A2.3. This and other supporting tables can be found in appendix A.

Figure 2.1. **Total numbers of small and large public school districts in rural and nonrural areas in 1993-94**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of

Figure 2.2. **Percentages of districts that were both small and in rural locations, by state, in 1993-94**

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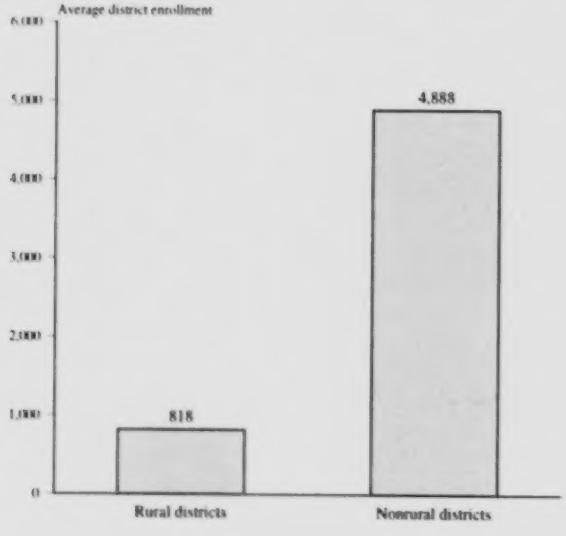
These numbers suggest that small rural school districts make up a major portion (28 percent) of all school districts in America, but they enroll far fewer students than other districts. The 1,131,000 students enrolled in small rural districts in 1993-94 constitute only about 1 student in 40 in the United States (see table A2.2 in appendix A for complete data). As shown in figure 2.3, the average size of rural districts, large and small, was only about 800 students, compared to an average of nearly 5,000 in nonrural districts.[7] Of course, small rural districts, by definition, had even fewer students, averaging about 250 per district.

Figure 2.3. Average enrollment size of school districts in rural and nonrural locations in 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Consideration of the sizes of districts requires information about the grade levels served. Using this report's definition of "small," a small elementary district serving grades K-8 might have between 1 and 224 students, a small secondary district serving grades 9-12 might have between 1 and 399 students, and a small unified district serving all 13 grades might have as many as 624 students. The preponderance of districts in the country (73 percent in 1993-94) are unified, but various comparisons between small rural and other districts are affected by the percentages of districts in each category that are elementary, secondary, or unified.

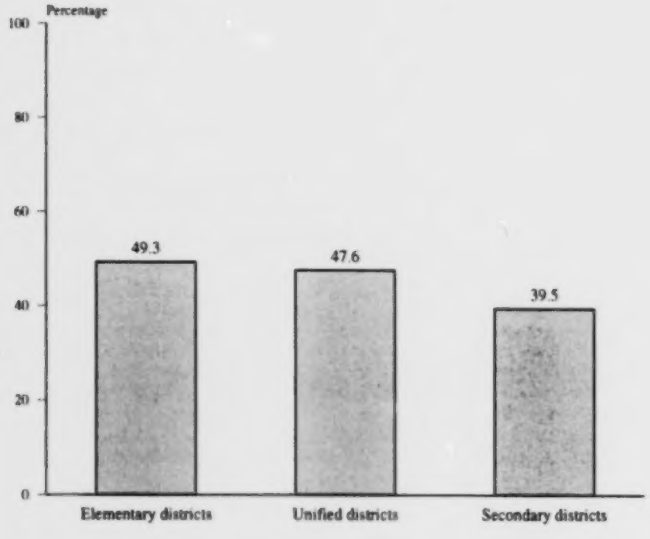
District Grade Level Types. In 1993-94, 49 percent of elementary districts and 48 percent of unified districts were rural, compared to 40 percent of secondary districts, as shown in figure 2.4. This difference suggests that either (a) in many rural areas, students were attending elementary schools in rural areas but were transported to high schools located in separate districts in towns or cities or (b) in rural areas more than nonrural areas, multiple separate elementary districts were

[7] Corresponding median enrollments were 434 and 2,039, respectively.

"feeders" into other rural secondary (or unified) districts for secondary education. Aggregate enrollments in elementary and secondary (i.e., nonunified) districts in rural and nonrural areas can shed light on these possibilities. As shown in figure 2.5, there were 294,000 students in elementary districts in rural areas and 70,000 students in secondary districts, compared to 2,268,000 in elementary and 964,000 in secondary districts in nonrural areas.

The preponderance of elementary districts that are K-8 and of secondary districts that are 9-12 suggests that there are a total of 33,000 students in each grade in elementary rural districts and only 17,000 students in each grade in secondary rural districts. In nonrural districts, there were about 252,000 students in each grade in elementary districts and 241,000 students per grade in secondary districts. The apparent attrition in rural districts, from 33,000 in elementary grades to 17,000 in secondary grades, exceeds that in nonrural districts by so much that it cannot be explained in terms such as increasing birth cohorts. Apparently, a large proportion of students enrolled in elementary rural districts did not go on to high school education in secondary rural districts. They either transferred to rural unified districts or to nonrural districts.

Figure 2.4. Percentages of elementary, secondary, and unified districts that were in rural locations in 1993-94

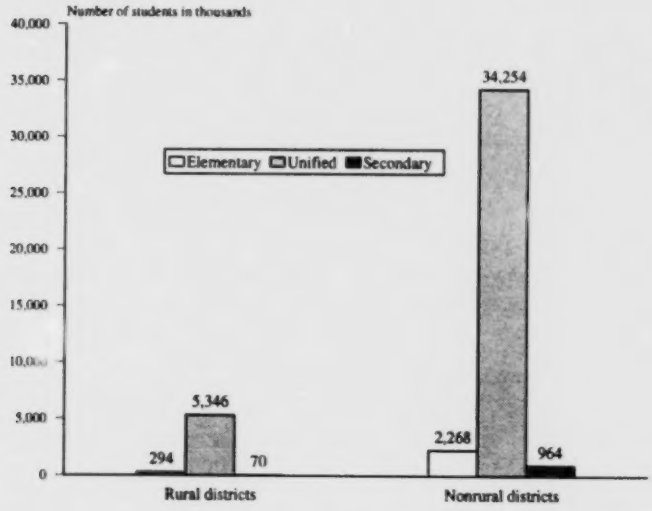


SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

In rural areas, 78 percent of the elementary districts and 84 percent of the secondary districts were small in 1993-94, but only 54 percent of unified districts were small, as shown in figure 2.6. There were large percentages small districts among all three types in rural areas, although the smallest districts were elementary.[8] In contrast, in nonrural areas, it was only among elementary

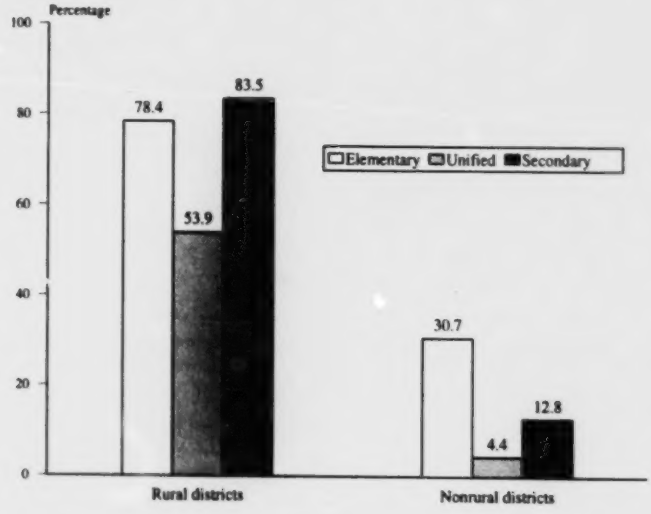
[8] The difference between secondary and unified districts is due primarily to the definition of "small:" a secondary district with 50 to 90 students in every grade would be considered small but a unified district would not.

Figure 2.5. **Total numbers of students in elementary, secondary, and unified districts in rural and nonrural areas in 1993-94**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Figure 2.6. **Percentages of elementary, secondary, and unified districts in rural and nonrural areas that were small in 1993-94**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

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districts that a substantial percentage of small districts could be found (31 percent). Only 13 percent of secondary and 4 percent of unified nonrural districts were small. Although cities and towns might break up their elementary schools into separate, small districts, local education agencies serving secondary grades rarely did so: the value of a larger size is more important in later grades, where students with different interests and aptitudes expect more curricular choices.

Trends in Small Rural Districts from 1986-87 to 1993-94

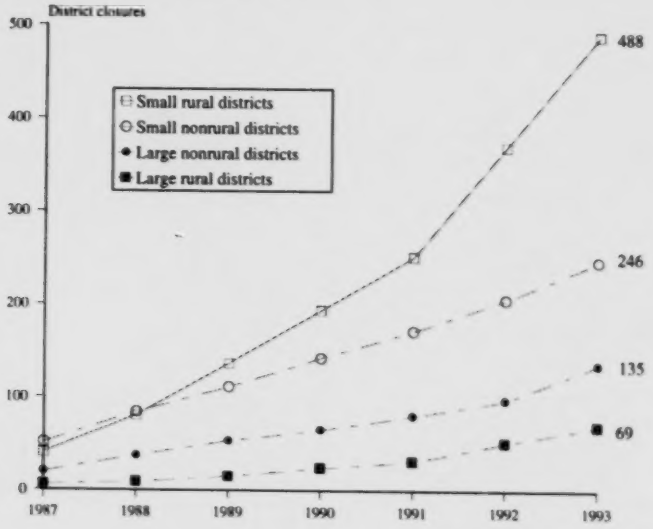
The snapshot of small rural districts in 1993-94 is one slice from a longitudinal trend, and findings of reliable trends over the preceding 8 years may provide the basis for guesses as to what the snapshot will show in the remainder of the 20th century. The Common Core of Data contains information about virtually all public school districts in the country, and information about changes in individual districts can be followed over the years.

This section, like similar sections in later chapters, examines trends in small rural districts—do they close, do they gain or lose students, how do they change? To support this purpose, each school district is classified as small and rural once for the entire period, even though its enrollment may grow past a threshold or a town may sprout up around it during the period. The classification is based on the earliest year of the period in which the district was in operation—except that the size determination (small or not small) was based on 1987-88 enrollment, rather than 1986-87 enrollment, due to the substantially greater amount of missing data requiring imputation in 1986-87, the first year of the most recent Common Core of Data series. Also, 1990 Census data played a major role in the determination of whether a district was located in a rural locale.

The most critical event that can happen to a school district is closure, with students assimilated into a nearby district or schools consolidated with a nearby district to form a "new" district. As shown in figure 2.7, about as many closures of small rural districts occurred between 1986-87 and 1993-94 as in all other categories of districts combined. Generally, districts that closed were small districts, whether they were rural or nonrural: only 2 to 3 percent of large districts closed. Finally, closures of small rural districts were not uniform over this period: almost half (237 out of 488) occurred, in fact, between 1991-92 and 1993-94.

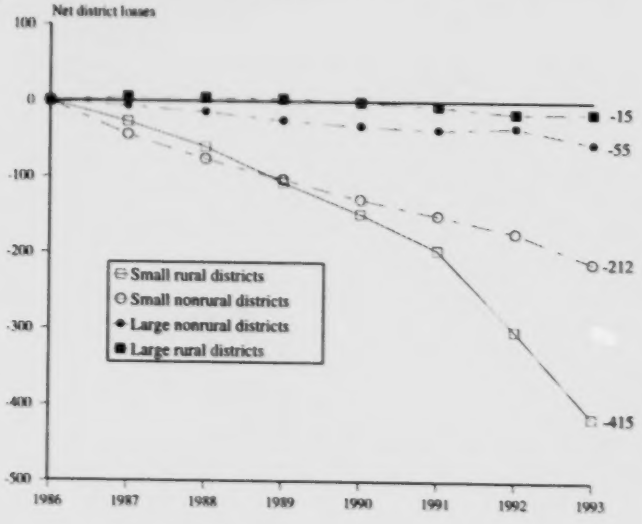
Some district consolidations resulted in the creation of a "new" district, and in a handful of cases, a district split into two districts, also creating "new" districts. Therefore, net losses of small rural and other districts were less than the total numbers of closures. As shown in figure 2.8, net losses amounted to 9 percent in small rural districts. By contrast, there was less than 1 percent net loss of large school districts over this period. Finally, it should be noted that over half of the net loss in small rural districts (219 of 415) occurred between 1991-92 and 1993-94.

Figure 2.7. **Cumulative numbers of small and large school district closures between 1986-87 and 1993-94 in rural and nonrural areas**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Figure 2.8. **Cumulative net losses in numbers of small and large school districts between 1986-87 and 1993-94 in rural and nonrural areas**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

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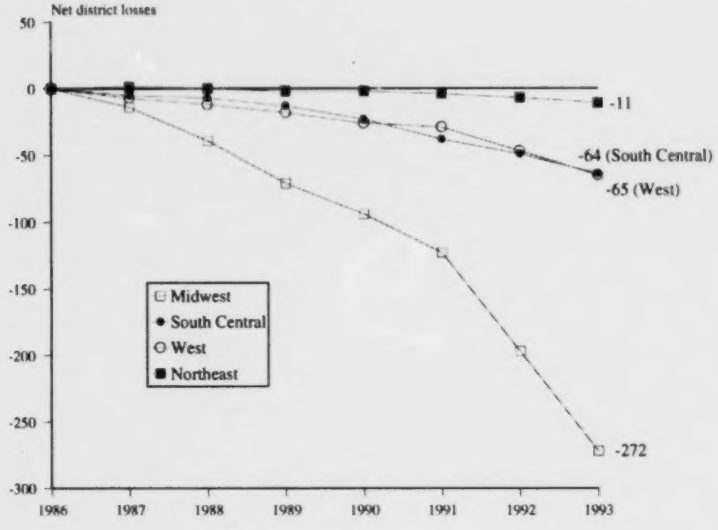
The greatest losses in small rural districts, both in raw numbers and percentages, were in the Midwest, where there was a net loss of 272 small rural districts (12 percent) between 1986-87 and 1993-94, as shown in figure 2.9. (In the Southeast, not shown in the figure, 3 of the 19 small rural districts closed.) In some states, the net loss of school districts was confined almost entirely to small rural districts, while in others, there were substantial net losses in other types of districts as well. In Iowa, South Dakota, North Dakota, and Minnesota, combined, there were 123 fewer small rural districts in 1993-94 than there had been in 1986-87, but these states lost only 3 other districts on balance. On the other hand, in Montana, Nebraska, Oklahoma, and Illinois, the net combined loss of 233 small rural districts was nearly matched by a net loss of 167 other districts. Clearly, patterns of closures and losses of districts varied between states, suggesting different factors at work.

Figure 2.9. Cumulative net losses in numbers of small rural school districts between 1986-87 and 1993-94, by region



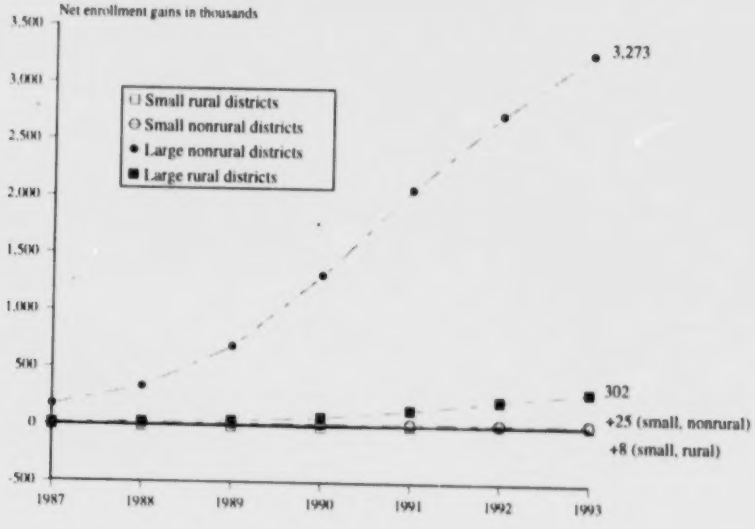
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

One might expect losses of school districts to be proportional to losses in school-aged populations, but in the period from 1986-87 to 1993-94, the total enrollment in American public schools rose from 39,600,000 to 43,200,000, a gain of 9 percent. Granted, these gains were not spread uniformly across rural and nonrural districts, but, as shown in figure 2.10, there were even small gains (cumulatively, 8,000 students) in small rural districts. Overall, these gains took place primarily in the last half of the period under study, and among small rural districts, a loss of 16,000 students between 1986-87 and 1990-91 was followed by a gain of 24,000 students in the next 3 years.

Taken together, declines in numbers of districts coupled with increases in numbers of students mean that the average enrollment size of school districts increased over this period. In both small rural districts and other districts, there was a 9 percent average increase in the enrollment of

school districts (if they did not close). To the extent that rural schools might feel pressures due to their minimal numbers of students, this is good news. The average size of rural school districts rose from 730 to 820, while the average size of nonrural school districts rose from 4,300 to 4,900. These changes gave district administrators both the opportunity and need to take actions to deal with increased enrollments, which are discussed in later chapters.

Figure 2.10. Cumulative net gains in numbers of students enrolled in small and large school districts in rural and nonrural locations, between 1986-87 and 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Net Loss by District Grade Level Types. Net losses of small rural districts were greatest among elementary districts: as shown in figure 2.11, there were 16 percent fewer small rural elementary districts in 1993-94 than there were in 1986-87, and this loss accelerated over the period of observation. Extrapolating to the future in a straight line, one would expect the number of small rural elementary districts to be only half their 1993-94 numbers by 2013-14.

At the same time that small rural elementary districts were declining in numbers, the total number of students in these districts remained roughly constant. Therefore, the average enrollments in these districts increased, as shown in figure 2.12. An average surviving small rural elementary district had 7.8 students per grade in 1986-87, and this average increased to 9.2 in 1993-94. To put this in context, the average surviving large nonrural elementary district had 168 students per grade in 1986-87, and this average increased to 208 in 1993-94.[9] Although these represent roughly the

[9] When the comparison is based on the same set of districts in 1986-87 and 1993-94, the average increase in a small rural district is from 9 to 10 students per grade, compared to an increase from 171 to 212 students per grade in large, nonrural districts.

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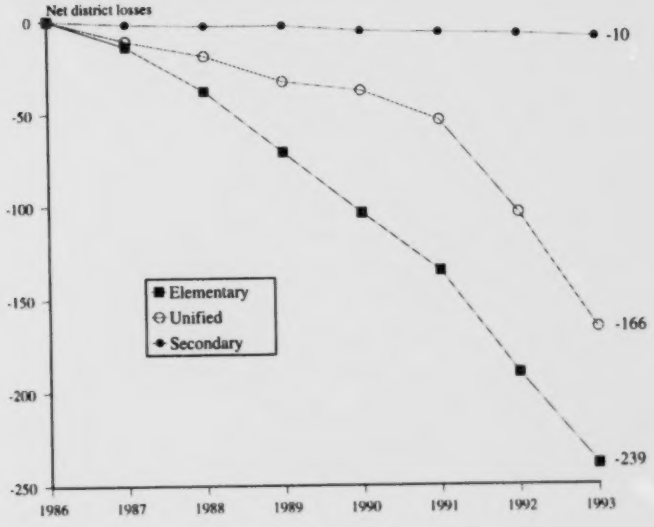
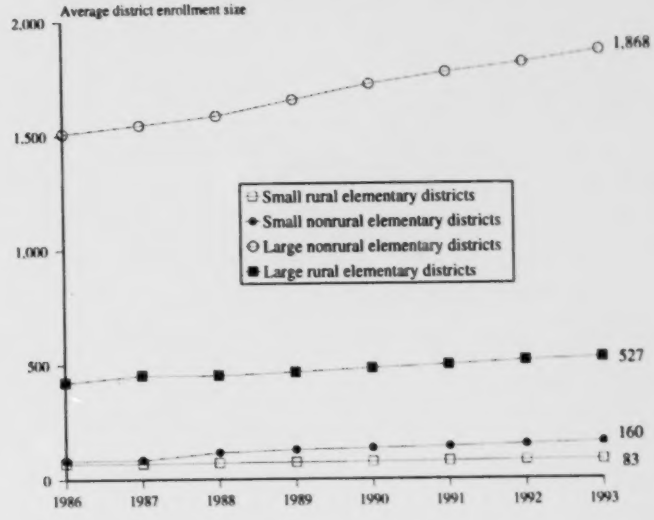
Figure 2.11. **Cumulative net losses in numbers of elementary, secondary, and unified small rural school districts, between 1986-87 and 1993-94**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Figure 2.12. **Increases in average enrollment sizes of small and large elementary school districts in rural and nonrural locations, between 1986-87 and 1993-94**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

same percentage increases, they have quite different policy implications for district administrators—in the case of small rural districts, the increase may help to ensure economic viability; in the case of large nonrural districts, it is likely to lead to pressures for capital outlay to build a new elementary school.

Summary

A snapshot of American school districts in 1993-94 reveals the following patterns.

> Half of the regular public school districts in America are rural, and the majority of these are small. The largest concentrations of small rural districts are in the Midwest, South Central, and West, where more than one-third of the districts fall into this category. There were few small rural districts in the Southeast. In the 13 states in the Southeast, there were only 16 small rural districts. Although 1 in 4 districts in the country is small and rural, these districts enroll only on in every 40 students. The majority of small rural districts, like other districts, are unified (K-12) districts.[10]

Extending the picture to the longitudinal trends over the preceding 7 years reveals additional patterns.

> Most school district closures in the country were small rural districts. Among small rural districts, 1 in 9 closed during this period. However, due to openings, the net loss was 1 in 11. The highest rates and numbers of closures of small rural districts were in the Midwest; and most closures of small rural districts were among elementary (K-8) districts. Contrasted with the declining numbers of districts, total enrollment increased slightly in small rural districts. As a result, the average surviving small rural district was 9 percent larger in 1993-94 than it was in 1986-87.[11]

The distributions of schools in districts and the ways in which districts dealt with changing conditions are discussed in the next chapter.

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[10] If the definition of small rural education were expanded to include large rural districts with a majority of small schools, an additional 254 districts would have been included. In particular, in the states in the South other than Texas, Oklahoma, and Arkansas, the total number of small rural districts would be increased from 16 to 54. The added districts had, by definition, larger total enrollments, so that under the expanded definition, small rural districts enroll 1/30 of the nation's students.

[11] With the expanded definition of small rural education, including 254 additional districts, the net loss of small rural districts remained at 415 but the total growth in enrollment in small rural districts was about 23,000, rather than 8,000, which meant that the average surviving small rural district experienced an 11 percent increase in enrollment.

3. Characteristics of Schools in Small Rural School Districts

In 1993-94, about 8,000 of the nation's 84,000 public schools were located in small rural districts (figure 3.1). Most small rural elementary districts operated a single school, while small rural secondary and unified districts usually had 2 or 3 schools (figure 3.3). High schools in four-fifths of all rural districts had fewer than 100 students per grade (table 3.1). Some of the schools in small rural districts were very small: a fifth of the schools in small rural districts had fewer than one teacher per grade (figure 3.4), including 64 percent of the elementary schools (figure 3.5). There were relatively few intermediate schools and many combined (K-12) schools in these districts (figure 3.7). About a quarter of the schools serving primary grades offered prekindergarten, similar to findings in other types of districts (figure 3.8). Finally, relatively few small rural districts either offered ungraded instruction or operated alternative, vocational, or special education schools (figure 3.9).

Between 1986-87 and 1993-94, about 415 schools closed their doors as the small rural districts in which they operated closed, and 315 more were assimilated into consolidated districts. Even in small rural districts that continued to operate, there was a net closure of 92 schools. There was a tendency for small rural districts to add intermediate schools, but there was a net loss of separate elementary and high schools in these districts (figure 3.13). The number of schools in small rural districts enrolling prekindergarten students more than doubled during this period (figure 3.14), while the number offering ungraded instruction declined (figure 3.15).

Background

This chapter describes characteristics of schools in small rural districts during the years from 1986-87 to 1993-94. Characteristics such as school size, educational focus (e.g., vocational education and alternative education), and grade structures are influenced by different historical, social, political, and economic factors. Many district and school reform efforts made in response to problems such as declining enrollments, low academic performance, and funding limitations alter school and grade structures. Although some rural districts and schools have turned to alternatives such as regional cooperatives and the use of telecommunication for delivering curricula in order to provide quality educational services for their children, Sher (1995) has pointed out that, in recent years, whereas in

> certain parts of metropolitan America such innovations as "schools-within-schools," decentralization, school/community partnerships, and more personalized teaching and learning strategies are being enthusiastically embraced, ... much of rural America (where ironically, many of these metropolitan "innovations" were first developed) is still being coerced into accepting school consolidations and school district mergers as the cornerstone of rural school reform (Barker 1991; DeYoung and Howley 1990; Monk 1991; Phelps and Prock 1991).

Others concur with Sher, and as Haller and Monk (1988) suggest, there are "inconsistencies between modern and traditional views of school size and . . . the traditional view is likely to dominate modern reform efforts in rural areas." The traditional view, according to Haller and Monk, favors consolidation.

Schools in Small Rural Districts in 1993-94

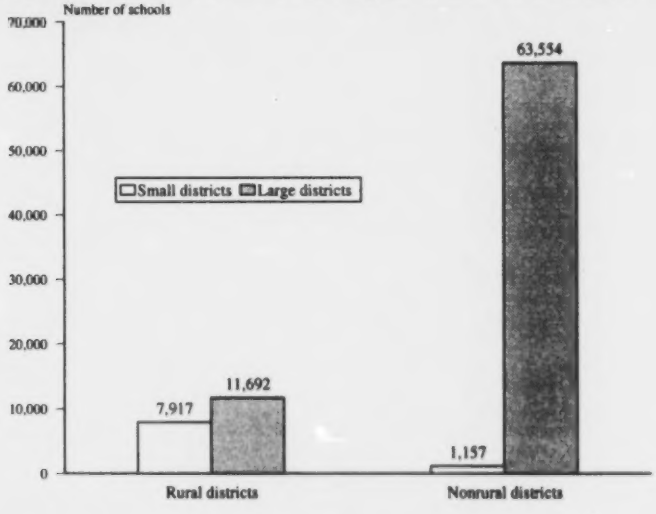
In 1993-94, 23 percent of the nation's public schools were located in rural districts, and 40 percent of those were in small districts. As shown in figure 3.1, 7,917 of the nation's 84,320 schools were located in small rural districts. Since there were 4,238 small rural districts in all, on average, a small rural district would have 1.9 schools. In fact, as shown in table A3.8 (in appendix A),[12] more than one-third (1,520) of these districts had one elementary school and one high school, and the next two most frequent types of small rural districts consisted of either a single elementary school (1,185 districts) or a series of one elementary, one intermediate, and one high school (462 districts).

The average number of schools in other districts was 7.3. Part of the reason for the smaller average number of schools in small rural districts is that more of these districts are separate elementary or secondary districts, rather than unified districts. Unified districts are much more likely

[12] Table A3.8 lists all combinations of elementary, intermediate, high, combined, and ungraded schools that were reported in three or more districts in at least 1 of the 8 years examined. Combinations that were reported less frequently are listed as "other." This table includes a few districts (13 in 1993-94) with no schools reporting either enrollment by grades or ungraded students.

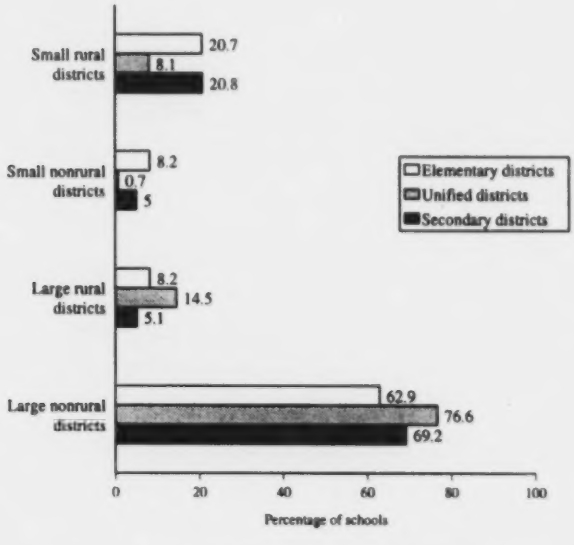
to have multiple schools. As shown in figure 3.2, about 20 percent of the schools in both elementary and secondary districts were in small rural districts, while only 8 percent of the schools in unified districts were in small rural districts.

Figure 3.1. Total numbers of schools in small and large districts in rural and nonrural areas in 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Figure 3.2. Percentages of schools in elementary, secondary, and unified districts that are in small and large districts in rural and nonrural areas in 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

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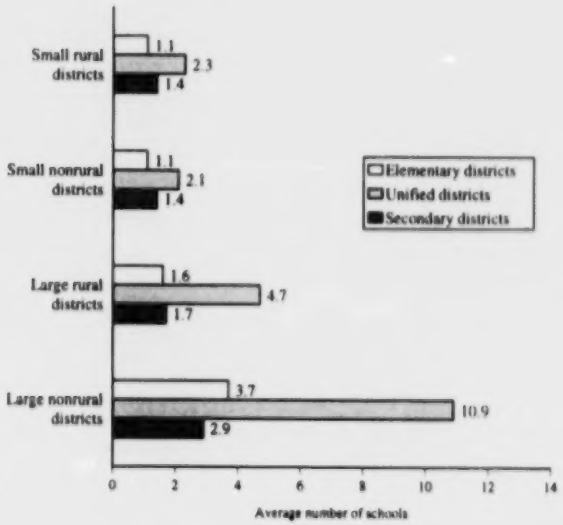
Based on this variation in levels, it is useful to examine the average number of schools per district by grade level type. As shown in figure 3.3, small rural elementary or secondary districts usually have only a single school, whereas small rural unified districts tend to have two. By contrast, large nonrural unified districts average over 10 schools. Thus, small rural districts tend to have fewest schools because they are more likely to be separate elementary or secondary districts, which have smaller numbers of schools, or because even when they are unified, they tend to have fewer schools than other unified districts.

Figure 3.3. Average number of schools in elementary, secondary, and unified districts that are in small and large districts in rural and nonrural areas in 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Small, Very Small, and Small Rural Schools. The criteria of "small" and "rural" have been applied in the preceding sections to school districts, but it is also of interest to know whether small and rural schools are almost always located in small and rural districts. Small schools can be defined exactly as small districts are, by whether the number of students in each of the elementary (or secondary) grades in the school averages less than 25 (or 100). One might consider a further category of "very small" schools—schools with so few students that they employ fewer than one teacher per grade.[13]

[13] Specifically, a "very small" school is defined as a small school (previously defined) whose number of full-time equivalent teachers is less than the number of grades in the grade span.

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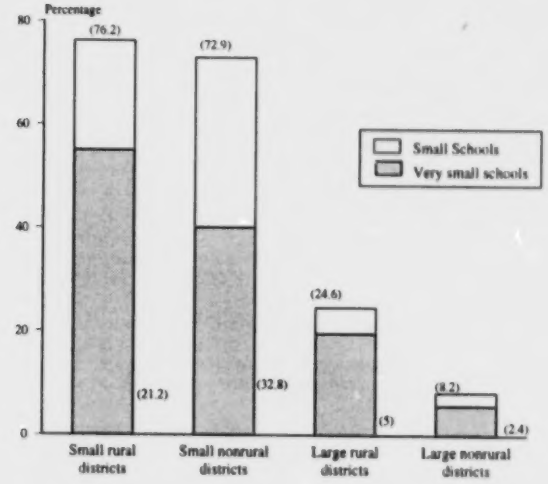
While most schools in small districts were small in 1993-94, as shown in figure 3.4, there were small schools, and even some very small schools, in large nonrural districts. These are typically special-purpose schools, such as special education schools or continuation schools for students who would otherwise drop out. Small and very small schools in small or rural districts, on the other hand, are generally the result of population sparseness, because they are typically the only school in the district serving a particular grade level. Very small schools, fitting the size stereotype of country schools of the late 19th century, still constitute 20 percent of the schools in small rural districts. (Although they are even more common in small nonrural districts, there are relatively few such districts. Very small schools are likely to be found in small rural settings.)

Figure 3.4. **Percentages of schools that were small or very small, in small and large districts in rural and nonrural areas in 1993-94**



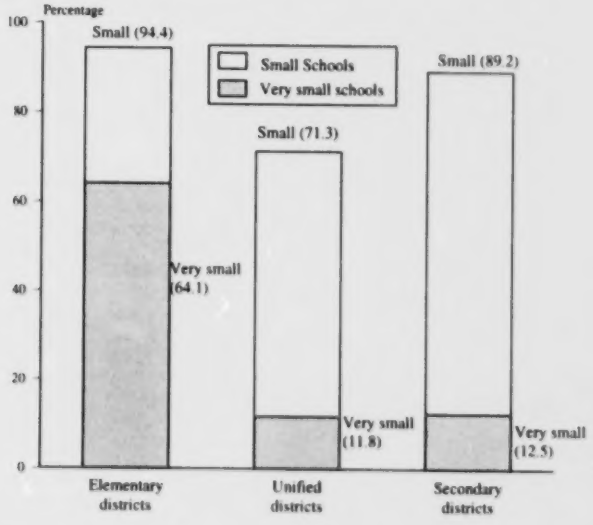
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Because schools have been categorized as "small" using the same students-per-grade threshold used in categorizing districts as "small," it may seem paradoxical that the percentages of schools in small districts that are small are not close to 100 percent. The explanation for this paradox is that many small unified districts have a single "small" high school (with fewer than 100 students per grade) and a single "large" elementary school (with more than 25 students per grade): K-12 districts with a single elementary school and a single high school and about 30 to 45 students per grade would be counted as small districts, but their elementary schools would not be counted as small. As seen in figure 3.5, only about 70 percent of schools in unified small rural districts were small, but about 90 percent of schools in separate elementary and secondary small rural districts were small.

Large schools in separate elementary and secondary small rural districts arise from two sources: (1) districts that split grade levels between schools and happen to have slightly more than the defining number of students per grade in the grades in one school but overall fewer than this number per grade in the entire range of grades offered in the district; and (2) the district classification of "small" was held constant across years, as discussed in chapter 1, to facilitate longitudinal comparisons, but the *school* classification of "small" was redetermined for each year—a few districts that were small in 1987-88 grew in enrollment until by 1993-94, one or more of their schools were no longer classifiable as small. A comparison of tables A3.1 and A3.2 shows that the total number of large schools in separate elementary or secondary small rural districts grew from 31 in 1987-88 to 112 in 1993-94.

The fact that very small schools in small rural districts are mostly elementary ones, as shown in figure 3.5, reflects the greater need for a critical mass of teachers at the secondary level, to address the needs for curricular choice.

Figure 3.5. Percentages of schools that were small or very small, in elementary, secondary, and unified small rural districts in 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

In most rural districts, high school students attended small high schools, as shown in table 3.1. In 1993-94, in 81 percent of rural districts with high schools (i.e., with schools serving grade 11 or 12) the largest[14] (or only) high school had fewer than 100 students per grade, and in 55 percent of rural districts, fewer than 50 students per grade. In only 21 percent of nonrural districts, by

[14] To avoid counting small special, nonregular, alternative high schools that sometimes accompanied regular high schools in the same district, the largest high school in the district was the focus of this comparison.

contrast, did all high schools have fewer than 100 students per grade, only 5 percent had fewer than 50 students per grade.

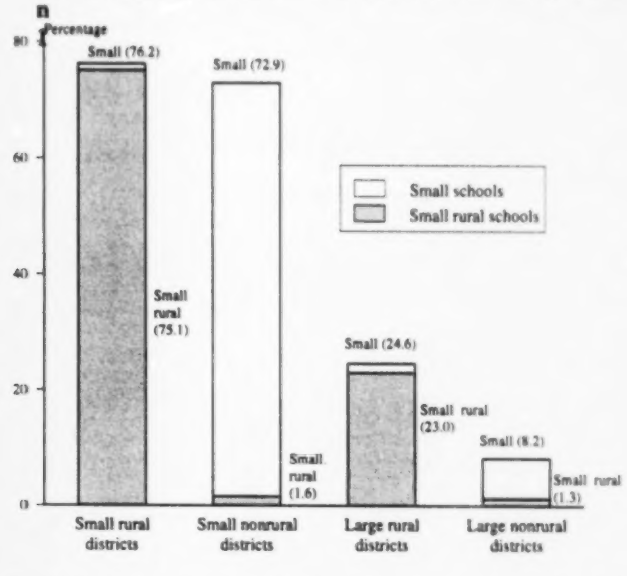
Table 3.1. Percentages of rural and nonrural districts, by enrollment per grade in largest high school, in 1993-94

Enrollment per Grade	Rural Districts	Nonrural Districts
Fewer than 50	54.9	4.8
50-99	26.1	16.5
100-199	14.2	31.9
200 or More	4.8	46.8
Total	100.0	100.0

Source: U.S. Department of Education, National Center for Education Statistics, Common Core of Data.
Note: Enrollments are for grades 9-12, in the largest school in a district that enrolled 11th or 12th grades.

The paradoxical comparisons concerning sizes of schools within districts do not appear to be matched by similar conflicts in the definition of rural locale, although it would be definitionally possible for many of the schools in rural districts to be, themselves, nonrural. As seen in figure 3.6, when the percentage of small rural schools is subtracted from the total percentage of small schools, only about 1 to 2 percent of the schools in rural districts were small but not rural. These arise because some multischool districts have a combination of rural and small town schools. They are called "rural districts" if more of their schools are rural than any of the other six locale categories, ranging from small town to large central city.

Figure 3.6. Percentages of schools that were small and rural, in small and large districts in rural and n areas in

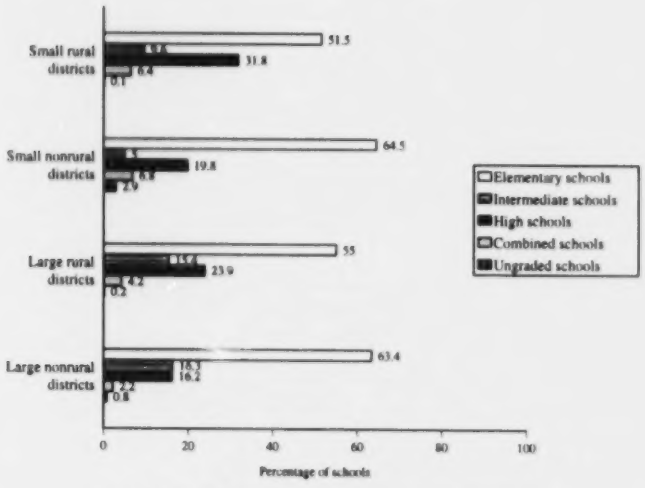


SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

School Grade Levels Served. Most schools in the nation are elementary schools, and that is also true in small rural districts. However, as shown in figure 3.7, there are differences in the distributions of schools serving different grade level types between small rural and other districts. Schools in small districts were less likely to be intermediate schools and more likely to be combined (e.g., K-12) schools; and in rural districts the ratio of elementary schools to high schools was roughly 2 to 1, compared to 4 to 1 in nonrural districts (table A3.5). Both of the variations between small and large districts suggest pressures to minimize the number of separate schools in operation. The variations between rural and nonrural districts suggest that rural districts (1) are often not in a position to operate multiple elementary feeder schools into a larger high school and (2) often do not have sufficient numbers of special students to warrant a separate, ungraded school.

In fact, examination of table A3.8 in appendix A suggests that in 1993-94, fewer than 300 of the 4,238 small rural districts in the country operated more than one elementary school, fewer than 70, more than two. As noted in chapter 2, there are relatively more separate elementary and secondary districts in rural areas; that is, elementary grade students in small rural districts were more likely to enroll in a different district when they went to high school.

Figure 3.7. **Percentages of schools that offered various grade levels, in small and large districts in rural and nonrural areas in 1993-94**



Note: Schools which did not specify their grade levels are not included in this figure.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data.

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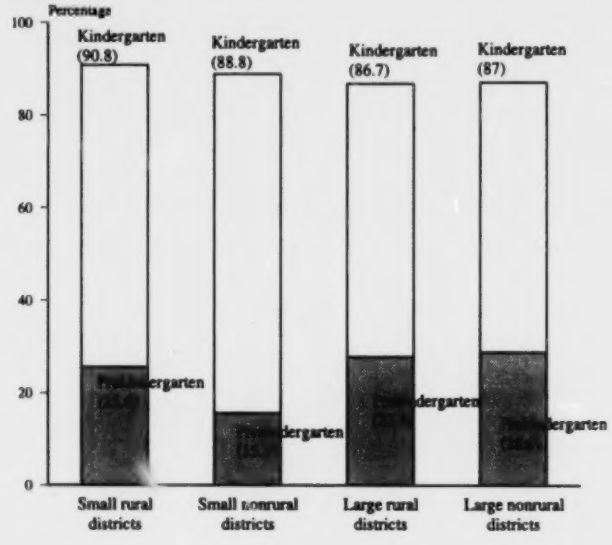
There is substantial state-by-state variation as to whether public school districts are expected to offer prekindergarten instruction. However, as seen in figure 3.8, small rural districts are not very different from other districts on this issue: about 9 out of 10 elementary and combined schools offered kindergarten, and about a quarter of the schools that offered kindergarten also offered prekindergarten. In small and large rural and nonrural districts, this represents a dramatic increase from 1986-87 to 1993-94, as shown in table A3.6.

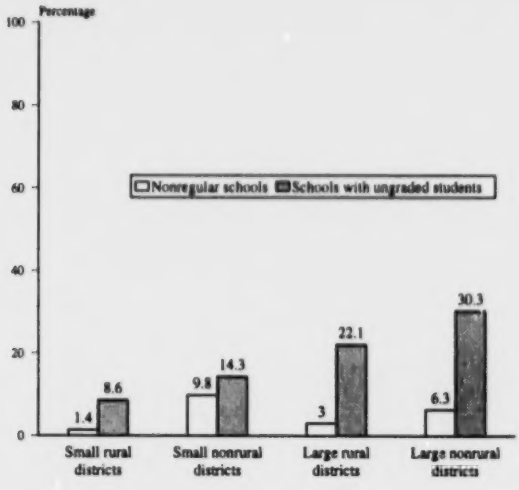
Figure 3.8. **Percentages of elementary and combined schools that offered kindergarten, and the percentage of these that offered prekindergarten, in small and large districts in rural and nonrural areas in 1993-94**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Some regular schools have offered ungraded instruction for some of their students, designed to avoid constraints imposed by a grade-oriented curriculum and a rigid annual grade promotion policy. Other schools have focused purely on groups of students with special needs, and these are recorded in the Common Core of Data as alternative, vocational, or special education schools. For this report, these latter three types of schools are combined into a category of "nonregular" schools. As shown in figure 3.9, very few of the schools in small rural districts were nonregular schools (1.4 percent), and few of the schools in these districts had any ungraded students (8.6 percent). However, as can be seen by comparing these numbers, many more schools offered some ungraded instruction than the number categorized as nonregular schools. Providing ungraded instruction appears to be more closely related to a district's size than to whether it is rural or not, reflecting the fact that few districts categorized as small in this report would have enough students with needs warranting the establishment of an ungraded curriculum. However, the availability of a nonregular school appears to be more closely relate to district location than to size: very few nonregular schools were in rural districts, large or small.

Figure 3.9. **Percentages of nonregular schools and schools offering ungraded instruction, in small and large districts in rural and nonrural areas in 1993-94**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Trends in Schools in Small Rural Districts from 1986-87 to 1993-94

The major change that a local education agency can make in response to changing populations and changing funding is to open new schools or close old ones. They can also change the span of grades offered in each school. Over the period from 1986-87 to 1993-94, as shown in figure 3.10, a substantial number of schools in small districts were closed, while a substantial number of schools were opened in large nonrural districts. The net loss of 507 schools in small rural districts represents only a global summary of the processes occurring. A closer examination of the data reveals that most school closures in small rural districts were in effect district closures, as no schools remained open in the district.

In some cases, as a district consolidated with another district, a school might remain open; however, in CCD such a school would be identified as a new school in the other district. In fact, as an automatic result of the 488 small rural district closures, 730 nominal school closures were recorded, but because there were 315 "new" schools in adjacent districts that added enrollment when a district closed, the actual loss of schools through small rural district closure appears to be 415, which is, coincidentally, exactly the same as the net loss of small rural districts (see table 2.8). In addition, in continuing small rural districts not involved in a consolidation, there was a net loss of 92 schools during this period. A tabulation of the frequencies of specific year-to-year transitions (e.g., from one elementary and one high school to one elementary, one intermediate, and one high school) is shown in table A3.9 in appendix A.

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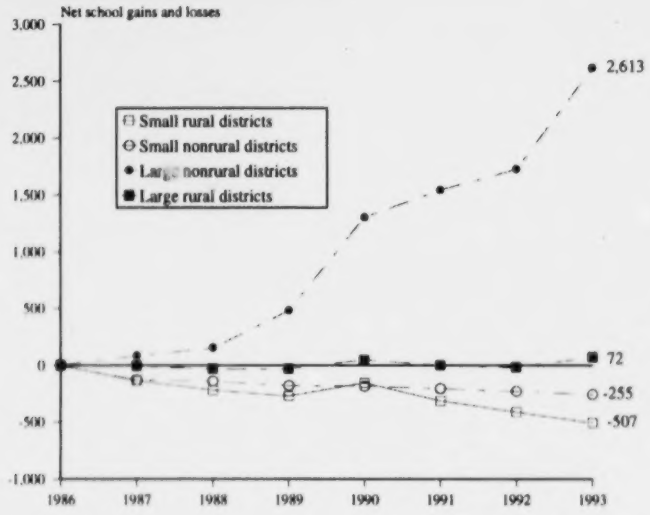
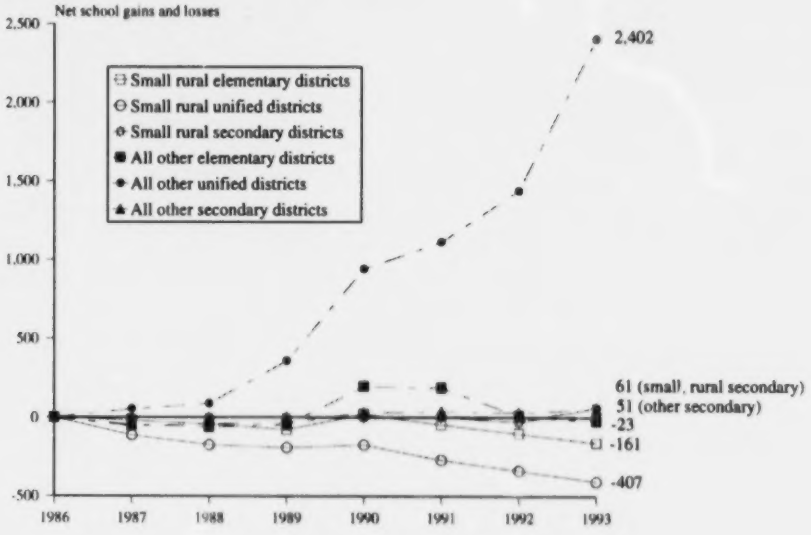
Figure 3.10. Cumulative net gains and losses of schools in small and large districts in rural and nonrural areas between 1986-87 and 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Closures and openings were not spread uniformly across elementary, secondary, and unified districts or across elementary, intermediate, high, or combined schools. As shown in figure 3.11,

Figure 3.11. Cumulative net gains and losses of schools in elementary, secondary, and unified small rural and other districts between 1986-87 and 1993-94



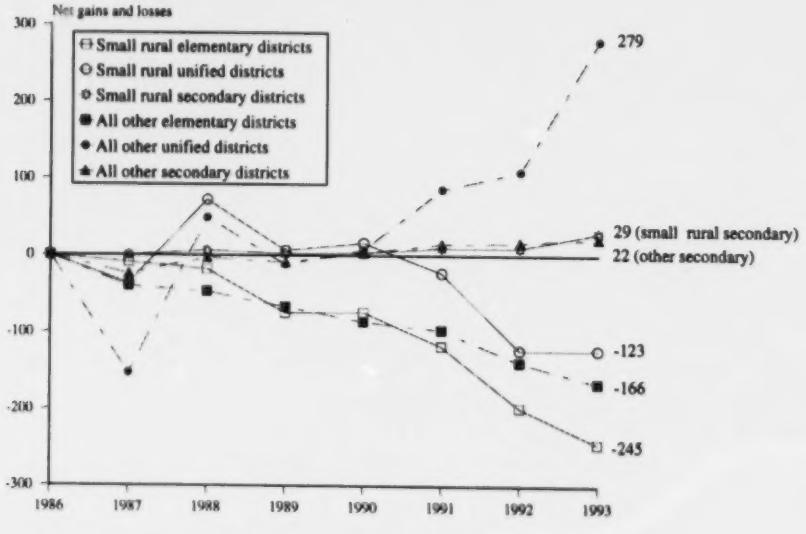
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

61 schools were added in small rural secondary districts, even though across all small rural districts the numbers of schools declined by 507, and the gains in schools in large or nonrural districts occurred primarily in unified districts. An examination of the details in table A3.9 in appendix A reveals that the major sources of the addition of 61 schools in small rural secondary districts were between 1991-92 and 1993-94 and were in school districts that added an elementary and an intermediate school to their single high school (54 new schools in 27 districts).

Addition of an elementary and intermediate school to a high school (secondary) district through consolidation with adjacent district(s) would change the grade span of the district, leading it to be counted later as a unified district. However, in order to present the information on trends, the district is counted in its original category in figure 3.11. (Other changes that would change grade level categories of some small rural districts that occurred include: 86 districts that dropped high school while keeping their elementary and possibly intermediate school, 10 districts that added high school, 41 districts that changed their elementary school to a combined school or vice versa, and 23 districts that dropped either their elementary school or the elementary grades from their combined school.)

Small, Very Small, and Small Rural Schools. Patterns of net gains and losses of small, very small, and small rural schools over the period from 1986-87 to 1993-94 are similar to the patterns for all schools in these districts. Most small school closures occurred in elementary districts, and the numbers of small schools increased in secondary districts. As noted above, these increases frequently involved addition of an elementary school through consolidation with an adjacent district.

Figure 3.12. Cumulative net gains or losses of very small schools, in elementary, secondary, and unified small rural and other districts from 1986-87 to 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

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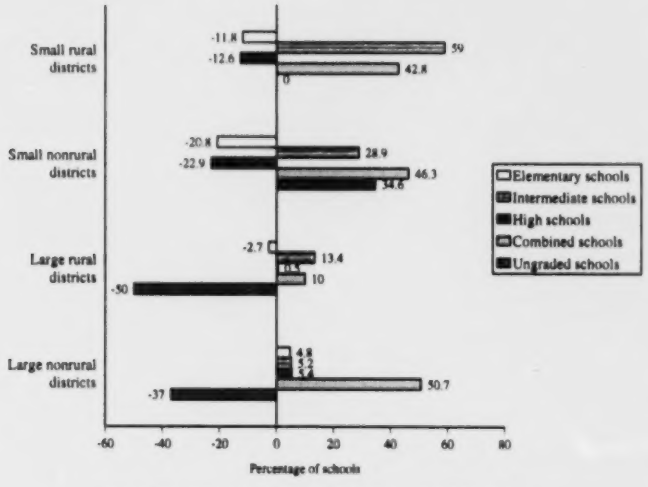
At the beginning of the period under examination, there were twice as many very small schools in small rural districts as in large nonrural districts. However, because the net loss of 339 very small schools in small rural districts, shown in figure 3.12, was "matched" by a net increase of 428 very small schools in large nonrural districts, by 1993-94 there were roughly the same number of very small schools (small schools with fewer than one teacher per grade) in both types of districts.

School Grade Levels Served. Substantial trends in changing grade spans of schools characterized small rural districts between 1986-87 and 1993-94, as shown in figure 3.13. In particular, there was a 59 percent increase in total intermediate schools, from 480 to 763, in these districts, and a 43 percent increase in total combined (e.g., K-12) schools, from 355 to 507. Many separate elementary and secondary districts were not only merging into unified districts, but they were also merging their separate elementary and secondary schools into combined (K-12) schools. At the same time, there were also substantial increases in combined schools in large and nonrural districts, suggesting that the attraction of combining all grades in a single school is not limited to small rural districts.

Figure 3.13. Net percentage gains and losses of schools that offered various grade levels, in small and large districts in rural and nonrural areas between 1986-87 and 1993-94



Note: Schools which did not specify their grade levels are not included in this figure.

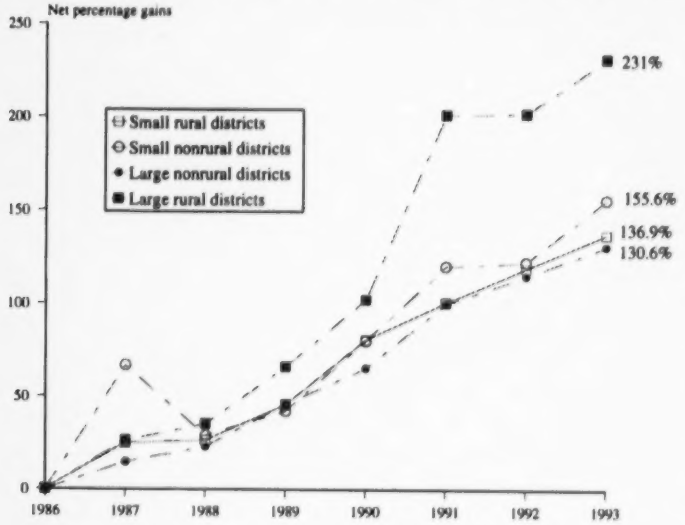
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

One might expect that particular changes in the configurations of schools in a district would be closely related to whether enrollment increased or decreased. However, some of the same transitions occurred in small rural districts with both decreasing and increasing enrollment. In particular, frequent changes in small rural districts with one elementary school and one high school

involved the opening or closing of an intermediate school. Among those with decreasing enrollment in a year, 83 added an intermediate school while 45 dropped their intermediate school; and among those with increasing enrollment, 98 added an intermediate school while 44 dropped their intermediate school. This can be attributed to the attractiveness of intermediate schools, but it may also suggest a lag of a year or two in district responses to changing enrollments. Further study of these changes is needed. A separate tabulation of changes in schools in districts with increasing and declining enrollment is presented in table A3.10 in appendix A.

A dramatic trend occurred during this time period in the enrollment of prekindergarten students, and it was felt as much in small rural districts as in other districts. As shown in figure 3.14, the number of districts enrolling prekindergarten students increased steadily and more than doubled in an 7-year period.

Figure 3.14. Cumulative percentage gains of schools enrolling prekindergarten students in small and large districts in rural and nonrural areas between 1986-87 and 1993-94



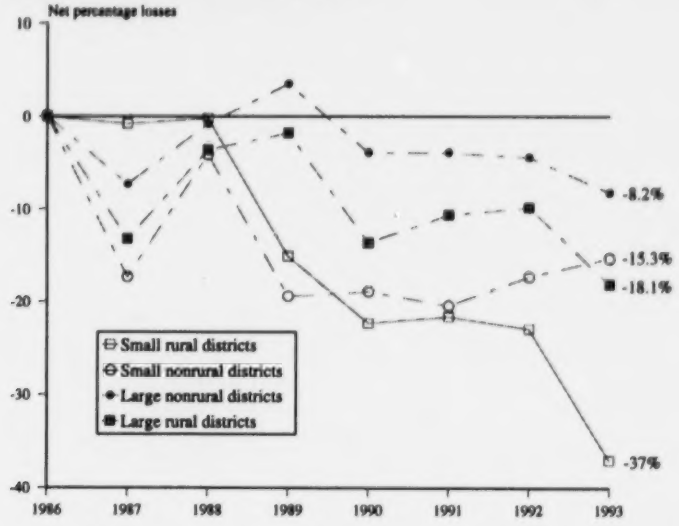
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Finally, as noted above, by 1993-94, schools in small rural districts were less likely than schools in other districts to offer ungraded instruction for some students, and schools in these districts were less likely to be nonregular schools. However, the trends for these two attributes were in opposite directions. As shown in figure 3.15, there was a decline in percentage of schools in small rural districts that offered ungraded instruction, and it was a more rapid decline than in other types of districts.

In 1993-94, small rural districts were also less likely to operate separate alternative, vocational, or special education schools. However, in this case there was a substantial trend toward *more* nonregular schools in small rural districts, as well as in other districts, as shown in figure 3.16.

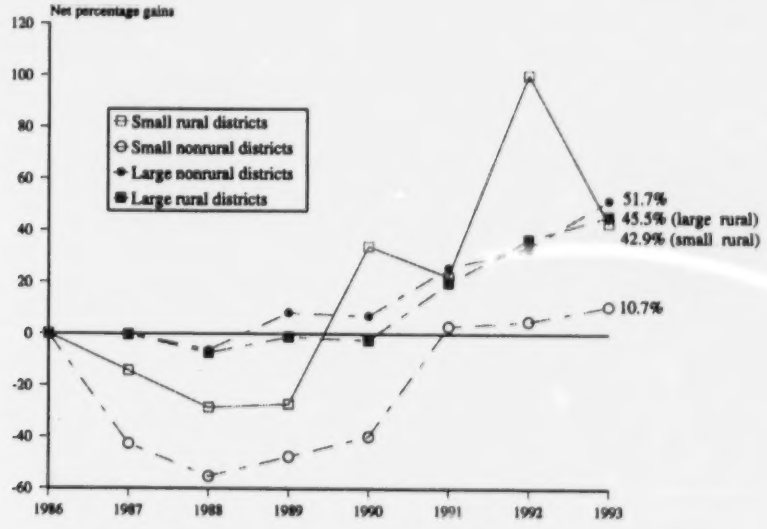
This increase was most pronounced during the period from 1989-90 to 1993-94, in which the number of nonregular schools in small districts doubled, after declining during the preceding 3 years.

Figure 3.15. **Trends in percentages of schools offering ungraded instruction, in small and large districts in rural and nonrural areas in 1993-94**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Figure 3.16. **Trends in percentages of nonregular schools, in small and large districts in rural and nonrural areas in 1993-94**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Summary

Focusing the snapshot of small rural school districts in 1993-94 on the schools in those districts reveals the following patterns.

> About 8,000 of the nation's 84,000 public schools were in small rural districts.[15] Most small rural elementary districts consisted of a single school. Secondary and unified districts were somewhat more likely to have two or three schools. A fifth of the schools in small rural districts had fewer than one teacher per grade, and this included 64 percent of the elementary schools. In four-fifths of all rural districts, high schools had fewer than 100 students per grade. There were relatively few intermediate schools and many combined schools in these districts, and few small rural districts had multiple feeder elementary schools for a high school.
>
> About a quarter of the schools with kindergarten also offered prekindergarten, similar to findings in other types of districts. Finally, relatively few of the schools in these districts offered ungraded instruction or were alternative, vocational, or special education schools.

Extending this picture to longitudinal trends over the preceding 7 years reveals additional patterns.

> During this period, about 415 schools closed as the small rural districts in which they operated closed, and 315 more were assimilated into consolidated districts. In addition, there was a net closure of 92 schools in small rural districts that continued to operate.[16] There was a tendency to add intermediate schools and combined schools, while there was a loss of separate elementary and high schools in these districts. The number of schools enrolling prekindergarten students more than doubled during this period, while the number of schools, both regular and nonregular, offering ungraded instruction declined.

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[15] If the definition of small rural education were expanded to include "large rural districts with a majority of small schools," the picture would be similar. In the additional 254 small rural districts, there were an additional 1,401 schools, or about 5 to 6 schools per district. As in the other small rural districts, many of the schools were very small.

[16] Although none of the additional 254 large rural districts with a majority of small schools in the expanded definition of small rural districts closed during this period, a net total of 76 schools in these districts were closed.

4. Characteristics of Students in Small Rural School Districts

In 1993-94, about 1,100,000 of the nation's 43,200,000 public school students were enrolled in small rural districts. More of the students in small rural districts were either white or Native American than elsewhere, while fewer were Asian or African American (table 4.1). Few school-aged children in small or rural districts (1.3 percent) were reported as having limited English proficiency (table 4.6); however, slightly more of the students in small rural districts than elsewhere had Individualized Education Programs (IEPs) to address special educational needs (11.5 percent) (figure 4.7). In the South and West, but not in other regions, relatively more of the children in small rural districts were living in poverty (figure 4.8).

During the latter part of the period from 1986-87 to 1993-94, enrollments increased in small rural districts, although not as fast as elsewhere. Although percentages of minority enrollment increased by 10 percent overall (from 31 percent to 34 percent of all public school students), they remained virtually constant in small rural districts, at about 12 percent (table A4.1b). While the percentage of Native Americans in small rural districts grew, the percentages of Asians and African Americans in these districts declined (figure 4.11). Finally, from 1987-88 to 1993-94, there was a gradual increase in the proportion of students with Individualized Education Programs (IEPs) in small rural districts, as well as in other types of districts (figure 4.12).

Background

Small rural school districts serve 2 to 3 percent of America's public school students. Are the students in these districts different from other students? Previous research (Stern 1994; Phelps and Prock 1991; Herzog and Pittman 1995) has found that students in rural areas are financially not as well off as their urban counterparts; they are geographically, economically, and culturally isolated; their parents have lower educational levels and lower educational expectations for their children; they are at greater risk of dropping out and have lower aspirations for higher education. On the other hand, they have more positive attitudes toward their schools and communities, and a higher percentage participate in extracurricular activities.

The CCD provides basic information on student characteristics. Information on racial composition of the student body and the number of students with Individualized Education Programs (IEPs) to address special needs is available for each year from 1987-88 to 1993-94. The decennial Census also provides information on school-aged children living in the area served by each school district, including the percentages of children with limited English proficiency (LEP) and living in poverty in 1990. While the Census information gathered in 1990 cannot be considered current for 1993-94, demographic changes are sufficiently gradual that they can be used to compare students enrolled in small rural districts with other students.

Students in Small Rural Districts in 1993-94

Minority Students. Recent projections suggest that by the year 2035, whites[17] will no longer comprise the majority of the nation's school-age population (Population Research Bureau 1993). Well before this time, Hispanics are expected to become the nation's largest minority group. These projections imply an increasing number of LEP students and an increasing demand for instructional programs for speakers of other languages. How are these changes affecting small rural districts?

In the 1993-94 school year, 135,000 African American, Hispanic, Asian, and Native American students were enrolled in small rural districts: about 1 percent of all minority students in the country. As shown in figure 4.1, they constituted about 12 percent of the students in small rural districts, a smaller percentage than in large districts and in nonrural districts. In large nonrural districts, where 85 percent of the nation's students attend school, the percentage of minority students was 37 percent.

The lower percentages of minority students in small rural districts do not necessarily mean that all small rural districts enroll few minority students. In fact, as shown in figure 4.2, in 1993-94 there were 286 small rural school districts in which a majority of students were members of racial or ethnic minorities (i.e., African American, Hispanic, Asian, or Native American students). In small

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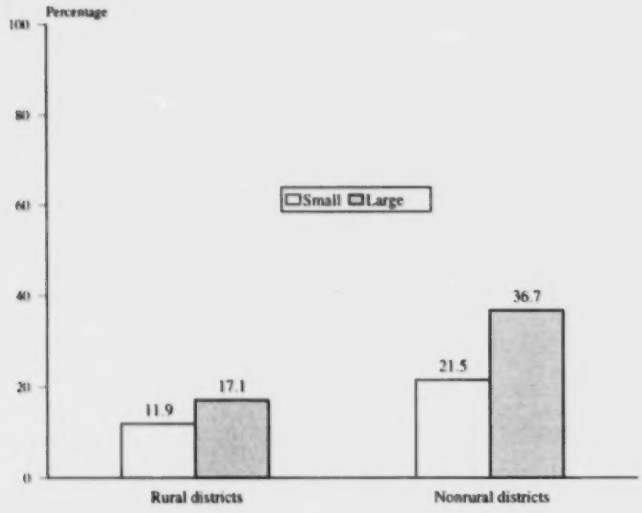
[17] In this report, the racial/ethnic term "white" is used to refer to white, non-Hispanic students; and the term "African American" is used to refer to black, non-Hispanic students. The five categories for CCD reporting are Black non-Hispanic, White non-Hispanic, Hispanic, American Indian/Alaskan Native, and Asian or Pacific Islander.

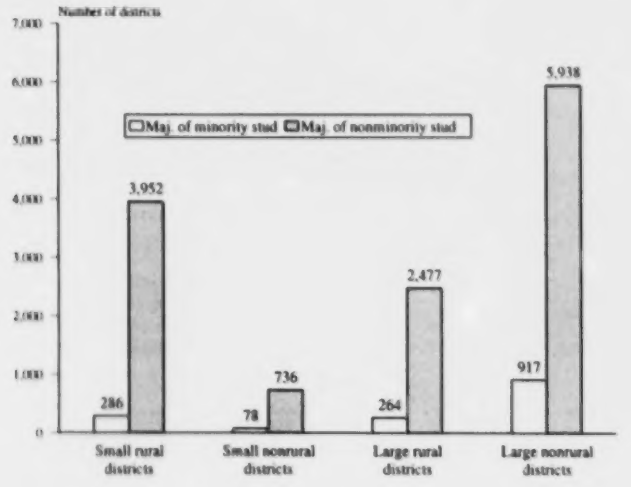
rural districts, as well as in other districts, large percentages of minority students were to be found in a relatively small percentage of the districts.

Figure 4.1. Percentages of minority students in small rural and other school districts in 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

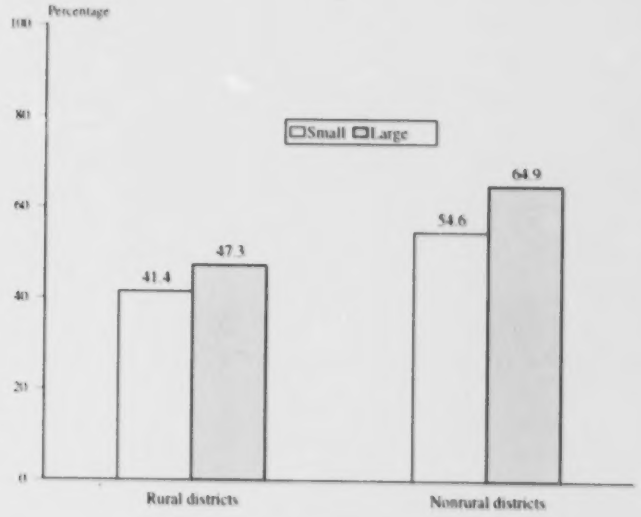
Figure 4.2. Numbers of small rural and other school districts in which a majority of students were members of minorities, in 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

There has long been concern that many minority students may be relatively racially isolated in districts with predominantly minority enrollment. Does the lower percentage of minority students in small rural districts mean that in these districts relatively fewer minority students are in districts with greater than 50 percent minority enrollment? Although the percentages in figure 4.3 indicate that a smaller percentage of minority students are enrolled in districts with a "majority of minorities" enrollment, in small rural districts, that percentage is still high: 41 percent of minority students in small rural districts are in the 286 majority-minority districts. Although that constitutes less isolation, numerically, than the enrollment of 65 percent of minority students in 917 large nonrural majority-minority districts does, it may well represent racial and ethnic segregation across greater distances.

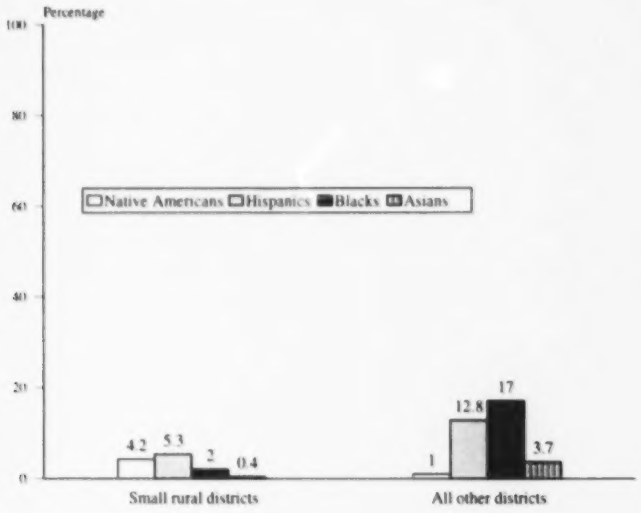
Figure 4.3. Percentages of minority students who were in districts in which a majority of students were members of minorities, in small rural and other school districts in 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Not all minorities are equally under-represented in small rural districts. Native Americans are, in fact, over-represented, as shown in figure 4.4. As shown in table 4.1, 10.5 percent of all Native American students were enrolled in small rural districts in 1993-94. On the other hand, Asian and African American students were least likely to be enrolled in small rural districts. For a complete table of counts of different racial and ethnic groups, see table A4.1c in appendix A. As a brief summary of the pattern of enrollment of racial and ethnic minorities compared to other students: Native American students, and to a lesser extent white and Hispanic students, were relatively more likely to be enrolled in small or rural districts. African American students were more frequently enrolled in large districts, and almost all Asian students were enrolled in large nonrural districts. Note that although the greatest numbers of all groups are enrolled in large nonrural districts, the proportion of all Native American students who are enrolled in small rural districts is almost three times as great as the proportion of white students who are in these districts.

Figure 4.4. **Percentages of Native American, Hispanic, Asian, and African American students in small rural and other school districts in 1993-94**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Table 4.1. **Percentages of racial-ethnic groups enrolled in small rural districts, compared to other districts, in 1993-94**

Racial/Ethnic Group	Small Rural	Large Rural	Small Nonrural	Large Nonrural	Total
Native American	10.5	21.0	1.3	67.2	100.0
White	3.5	13.3	0.5	82.7	100.0
Hispanic	1.1	3.6	0.4	94.9	100.0
African American	0.3	6.5	0.1	93.1	100.0
Asian	0.3	1.5	0.2	98.0	100.0
Combined	2.6	10.6	0.5	86.3	100.0

Source: U.S. Department of Education, National Center for Education Statistics, Common Core of Data.

Each ethnic minority is present in small rural districts in all regions of the nation, but the pattern is not uniform. When the percentages of ethnic minorities are compared to the percentages of all students in small rural districts, separately by region, as in table 4.2, whites and Native Americans are clearly over-represented in the South Central and Midwest regions.

Table 4.2. **Percentage of students enrolled in small rural districts, by region and racial-ethnic group in 1993-94**

	All Students	Native American	White	Hispanic	African American	Asian
Northeast	1.2	1.2	1.7	0.1	0.1	0.1
Southeast	0.1	>0.05	0.1	>0.05	0.1	>0.05
South Central	5.7	21.2	8.0	2.3	2.5	0.5
Midwest	5.6	12.8	6.7	1.1	0.2	1.1
West	2.0	7.9	2.7	0.9	0.2	0.2
All regions	2.6	10.5	3.5	1.1	0.3	0.3

Source: U.S. Department of Education, National Center for Education Statistics, Common Core of Data.

Students with Limited English Proficiency (LEP). Students whose native language is not English are evaluated by schools to determine whether they need special instruction, such as bilingual instruction or instruction in English as a second language. Recent immigrants, including both Hispanic and Asian students, are more likely to be determined to have limited English proficiency, and it is of interest to know how many of the students in small rural districts are classified as LEP. Although this information is not available directly in CCD, it is available from the school district mapping of the 1990 decennial Census data. Although, as will be discussed later, there were as much as 10 percent increases in Hispanic and Asian enrollments between 1990-91 and 1993-94, the 1990 Census data provide an indication of the relative incidence of LEP students in small rural districts at the mid-point of the time span covered in this report. These estimates are compared to percentages in other districts in figure 4.5.

Figure 4.5. **Percentages of school-aged children with limited English proficiency in small rural and other school districts in 1990-91**

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

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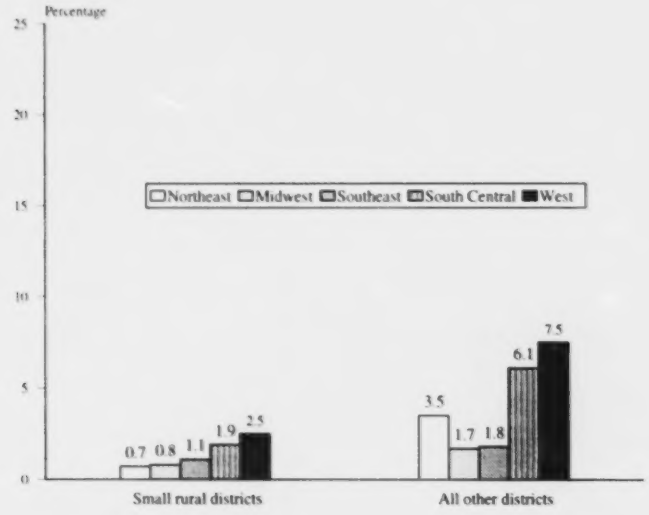
Three times as great a percentage of school-aged children were identified as LEP in large nonrural districts as in small rural districts. This is a larger difference than would be implied by the ratios of Hispanic students in these types of districts but similar to the combined ratios for Hispanics and Asians (see table A4.1d). In any case, these data do not provide a clear picture of whether limited English proficiency is more or less prevalent among Hispanic or Asian students in rural or nonrural settings.

Prevalence of school-aged children with limited English proficiency is greater in some regions than in others, and as shown in figure 4.6, that is true in small rural districts, as elsewhere. There were relatively fewer LEP children in small rural districts in all major regions of the country than in large or nonrural districts. However, this was especially true in the Northeast, South Central, and West. In the Midwest and Southeast, there was only about a 1 percent difference between the rates in small rural and other districts; in the other regions, large and nonrural districts served substantially greater percentages of LEP students than small rural districts did.

Figure 4.6. Percentages of school-aged children with limited English proficiency in small rural and other school districts in 1990-91, by region



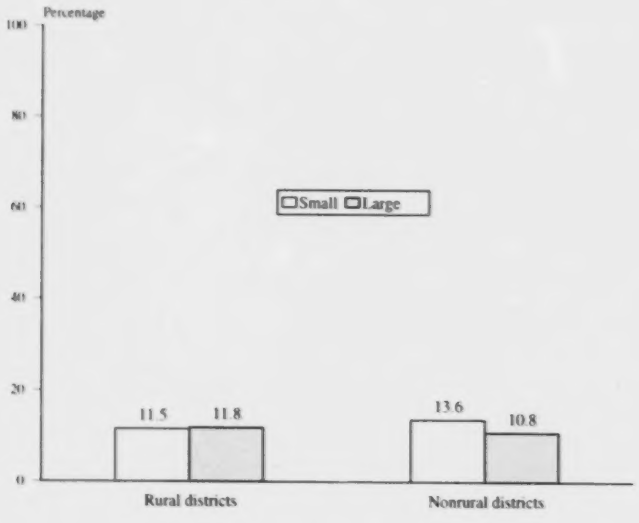
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Students with Individualized Educational Programs (IEPs). Programs to provide equitable access to a quality education for students with a variety of special needs, ranging from moderate learning disabilities to blindness, deafness, and orthopedic disabilities, have been implemented increasingly over the past three decades.

The prevalence of needs for special education are reflected in reported counts of students with the Individualized Education Programs that are required by law to be developed for each student determined to have a special need. In 1993-94, as shown in figure 4.7, about 11 percent of students

in small rural districts had IEPs. That means that there were about 130,000 students with IEPs in the 4,238 small rural districts in the country—about 30 students per district, on average, or roughly 2 to 3 students per grade. The percentage of students in small rural districts with IEPs was similar to the percentages in other districts.

Figure 4.7. **Percentages of students with Individualized Education Programs in small rural and other school districts in 1993-94**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

It is important to note that children in small rural districts are just as likely to need special education services as children in other districts. However, researchers have found that providing opportunities for these groups of students has been particularly difficult to implement in rural areas for several reasons. Overall, there are relatively few special education students in each district, which makes it hard for rural areas to meet the varied needs of their special education population (Berkeley and Ludlow 1991). Furthermore, it can be hard to retain teachers because, in addition to lower salaries, rural districts often have difficulty providing inservice training and other staff development activities for special education teachers. Ballou and Podgursky (1996) have noted that, on average, teachers in rural schools are less experienced and less likely to have advanced degrees than other teachers.

Inadequate transportation services (often the result of geographic distances, harsh weather, and poor roads) and lack of availability of technical resources add to the difficulty of delivery of special education services in rural areas. Rural districts have tried to cope with these problems by mainstreaming special education students, using technology, and creating interagency collaborative agreements and school consortia to share services. However, these solutions occasionally create new

problems. For instance, school consortia can result in increased travel distances for students and loss of local control (Phelps and Prock 1991; Berkeley and Ludlow 1991).

Students in Poverty. As mentioned earlier, poverty is higher in rural areas than nonrural areas. Since the mid-1960s, federal policies in education have recognized the need to provide supplementary funding to school districts in high poverty areas to ensure equal access to education for disadvantaged students. The 1990 decennial Census estimated the percentage of school-aged children in each school district who are living in households whose incomes are below the poverty-line, and this information can help to describe students in small rural districts.

Although, like other Census measures (including percentages of children with limited English proficiency), the poverty percentage is based on students aged 5 to 17, whether or not they are enrolled in public schools, use of this measure to compare small rural and other public school districts should involve relatively small error because roughly 90 percent of school-aged children are enrolled in public schools. Finally, for the purpose of this report, this 1990 percentage has been used as an approximation for the entire period from 1986-87 to 1993-94. Although populations of districts change, the income distribution changes are relatively slow, so the approximations should be reasonably close for the 3 to 4 years on either side of 1990.

As shown in figure 4.8, between 15 and 25 percent of students in small rural districts are estimated to be living in households with incomes below the poverty line. In the Northeast and Midwest, the percentages in small rural districts are nearly the same as in other districts, but in the South and West, somewhat more of the students in small rural districts are in poverty than in other districts.

The effects of poverty on educational opportunity are not limited to a student's immediate household (e.g., availability of reading material, a place to study, and parental modeling of achievement). Schools in communities with a high level of poverty have more difficulty providing quality education for all of their students. Thus, it is of interest to look at poverty in terms of the percentages of students enrolled in high, medium, and low poverty districts. Figure 4.9 shows the percentages of students enrolled in the highest and lowest quarters of districts, ranked on percentage of children in poverty.[18]

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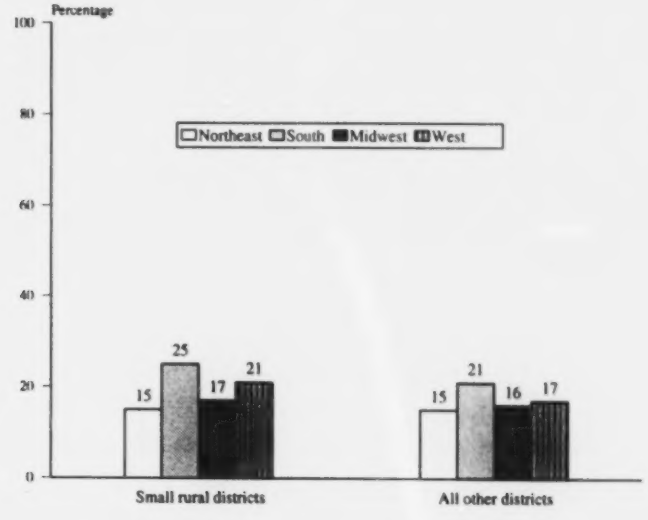
[18] Note that the percentages of students in the high poverty quartile districts are higher than 25 percent for all four categories, small and large rural and nonrural, districts. The reason for this is that the quartiles are not weighted by enrollment. The percentages of students in high poverty districts are greater than 25 percent because high poverty districts enroll more students on average than an equal number of low or medium poverty districts.

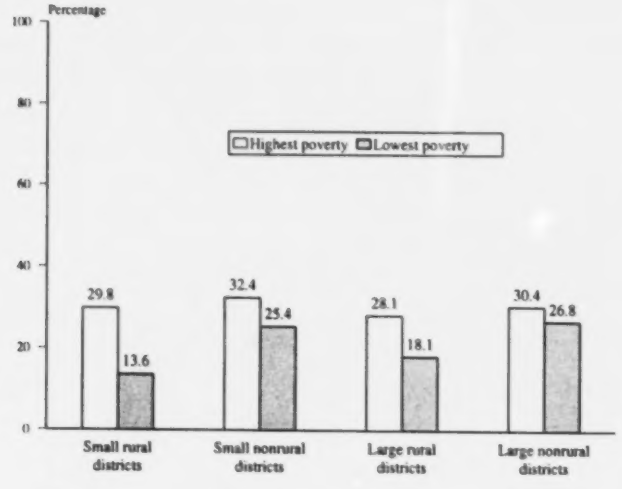
Figure 4.8. **Estimated percentages of students in poverty in small rural and other school districts in 1993-94, by region**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

Note: To compute the percentages in this figure, the estimated number of students in poverty in each public school district in 1993-94 is assumed equal to the 1990 decennial Census percentage of school—aged children in poverty within that district's boundaries, times the 1993-94 enrollment in the district.

Figure 4.9. **Percentages of students in small rural and other districts who are in the highest and lowest quarters of districts, ranked on poverty percentage, in 1993-94**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

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Although the percentages of students enrolled in highest poverty districts are about the same (30 percent) in small rural districts as in other districts, the percentages of students in low poverty districts is much lower in both large and small rural districts than in nonrural districts. More specifically, only 14 percent of students in small rural districts are enrolled in the lowest poverty quartile (i.e., richest) districts, compared to 27 percent of students in large nonrural districts. That is, at the district level, the distinction is not that small rural districts are more likely to have students in poverty, but that they are less likely than nonrural districts to include affluent families.

Trends in Student Populations in Small Rural Districts from 1986-87 to 1993-94

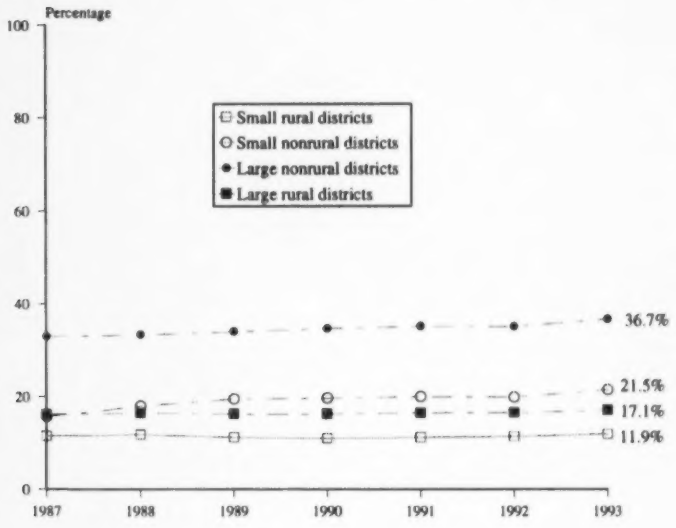
As reported in the preceding chapters, the numbers of small rural schools and school districts were declining from 1986-87 to 1993-94, while, especially at the end of this period, enrollments were increasing (although not as fast as in other districts). Did decreases or increases in enrollments of particular groups of students follow the same patterns in small rural districts as in other districts?

Data on percentages of children in households with income below the poverty line and on percentages of school-aged children with limited English proficiency were only available for a single year, from the 1990 decennial Census. Therefore, no trend analyses were performed to determine whether variation in district LEP percentages were related to enrollment growth or other trends in small rural districts.[19]

Minority Students. Counts of African American, Hispanic, Asian, and Native American students have been reported in the Common Core of Data since 1987-88. As shown in figure 4.10, the numbers of minority students generally grew about 10 percent faster than the numbers of white students between 1987-88 and 1993-94, but not in small rural districts, where the percentages were essentially constant across years. Thus, while the percent minority overall rose from 30.5 percent to 33.9 percent, it stayed between 11 percent and 12 percent in small rural districts.

[19] However, for descriptive purposes, three tables in appendix A (A4.4, A4.5a, and A4.5b) display poverty percentages across the 8 years, combining CCD data on changing total enrollments in each district with 1990 values for the percentage of children in poverty in that district. That is, the trends are defined to be consistent with the assumption that poverty rates for individual districts remained constant over the period. They are intended to indicate whether enrollments grew faster in high-poverty or low-poverty districts over this period.

Figure 4.10. Percentage of minority students in small rural and other school districts, 1987-88 to 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

The specific patterns of increased and decreased enrollment of African Americans, Hispanics, Asians, and Native Americans in large and small rural and nonrural districts are shown in figure 4.11. With the exception of Hispanics, the changes follow a simple pattern: the larger the percentage in 1987-88, the greater the growth in percentage between 1987-88 and 1993-94: African American (percentage) enrollment increased in large nonrural districts, where it was already highest, Asian enrollment increased in nonrural districts, especially in large ones, where it was already highest, and Native American enrollment increased most in small rural districts, where it was already highest. Hispanic (percentage) enrollment increased in all four categories of districts and increased most in nonrural districts, where it was already highest. However, although the highest percentage of Hispanic students was in large nonrural districts in 1987-88, there was a greater percentage increase in small nonrural districts. Nevertheless, the general pattern was not one of increased mixing of racial and ethnic minorities across the rural-nonrural boundary during this period. Simultaneously, as can be seen indirectly in figure 4.10 and directly in table A4.1b, the decline in percentages of white enrollment were largest in nonrural districts, where the white percentage enrollment was already lower in 1987-88. Thus, the racial and ethnic differentiation between small and large rural and nonrural districts was greater in 1993-94 than it was in 1987-88.

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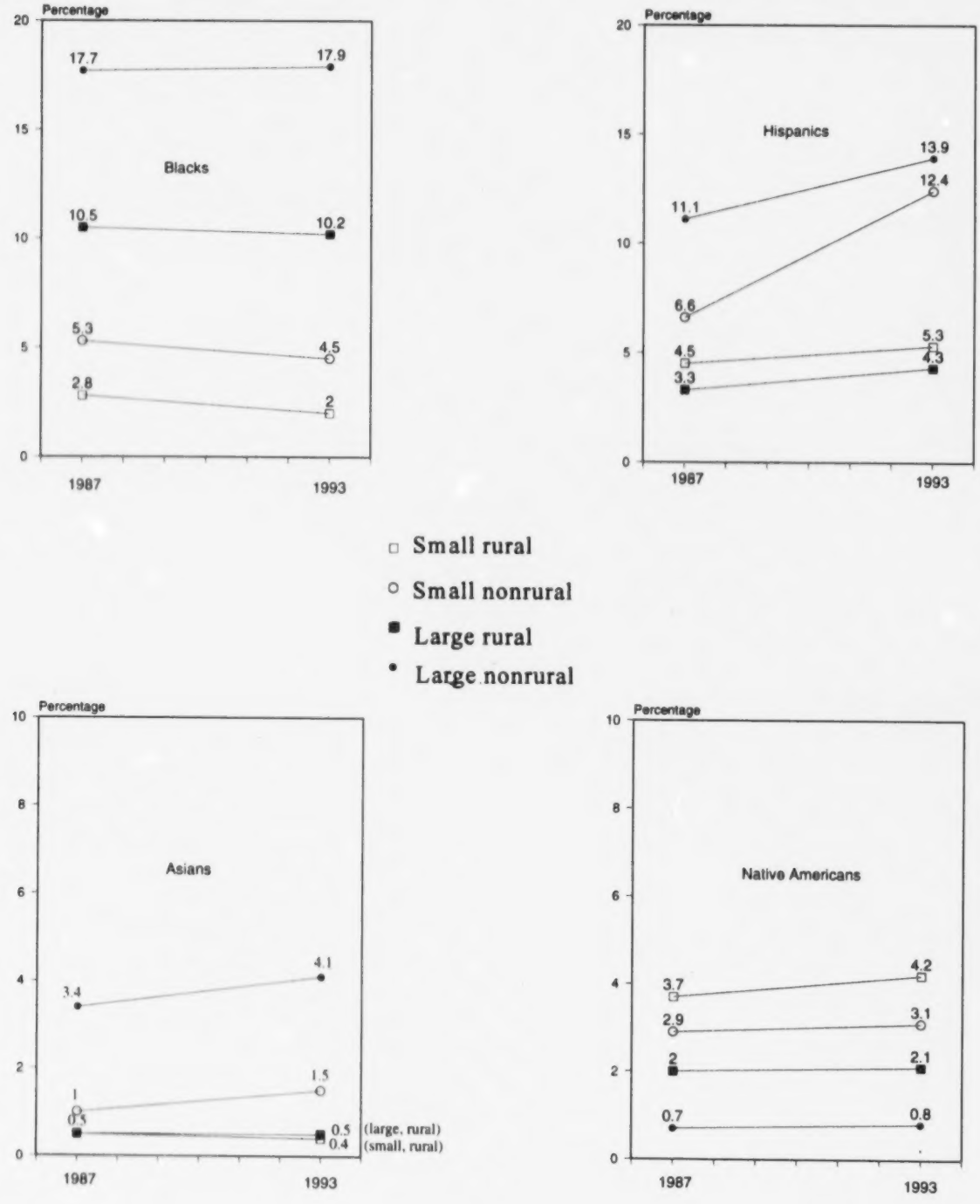
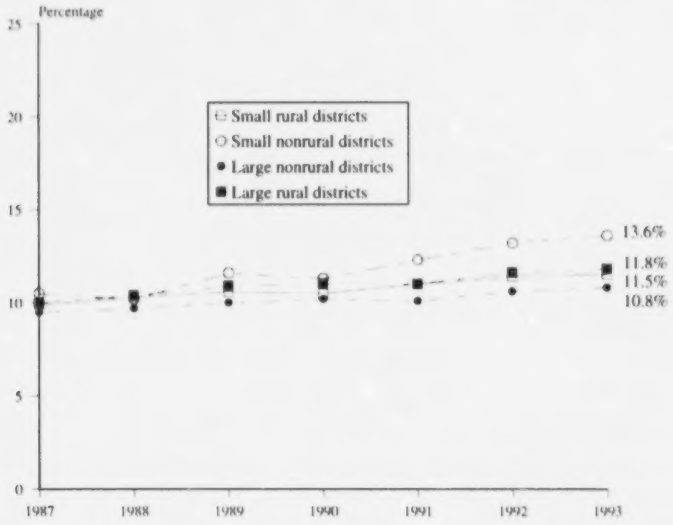
Figure 4.11. **Percentage of minority students in small rural and other school districts, 1987-88 and 1993-94, by racial-ethnic group**



Students with Individualized Education Programs (IEPs). The number of students reported as having IEPs in small rural districts increased from 110,000 to 130,000 between 1987-88 and 1993-94.[20] This represents an annual 2.9 percent rate of increase, slightly smaller than the 3.8 percent increase in other districts. Students with IEPs increased at a faster rate than overall enrollment in small rural districts. As a result, as shown in figure 4.12, the percentage of students with IEPs in small rural districts increased from slightly less than 10 percent in 1987-88 to 11.5 percent in 1993-94. Clearly, more students' special needs were being identified in small rural districts, as they were in other districts, as time passed. As pointed out earlier, in 1993-94, the percentages in small rural districts were similar to percentages in other districts, and the relative change over time is comparable as well.

Figure 4.12. Percentage of students with Individualized Education Programs in small rural and other school districts, 1987-88 to 1993-94.



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

[20] Special education counts in the Common Core of Data were incomplete in the early years of this period. In some years, certain states reported no IEP counts, and for two states, no IEP counts were reported in any of the years. For those two states, data obtained directly from the states were used for this report; and for all states, missing and uniform zero reports were replaced with statistically imputed values.

Summary

Focusing the snapshot of small rural school districts in 1993-94 on the students in schools in those districts reveals the following patterns.

> About 1,100,000 of the nation's 43,200,000 public school students were enrolled in small rural districts. More of the students in small rural districts were either white or Native American than elsewhere, while fewer were Asian or African American; and although more than 50,000 Hispanic students were enrolled in small rural districts, relatively more were enrolled in urban districts. Fewer of the school-aged children in small or rural districts were reported as having limited English proficiency; however, slightly more of the students in small rural districts were reported to have Individualized Education Programs to address special educational needs. As a national average, relatively more children in small rural districts were living in poverty, but this pattern only occurred in the South Central, Southeast, and West. Overall, it was not the case that more of the students in small rural districts were attending schools in the highest poverty districts; rather, fewer were in the most affluent districts (14 percent, compared to 27 percent in large nonrural districts).[21]

Extending this picture to trends over the preceding 7 years reveals additional patterns.

> During the latter part of this period, enrollments increased in small rural districts, although not as fast as elsewhere. Although the percentage of minority enrollment increased by 10 percent overall (from 31 percent to 34 percent), it remained constant in small rural districts, at about 12 percent. While the percentage of Native Americans in small rural districts grew, the percentages of Asians and blacks in these districts declined. Finally, between 1987-88 and 1993-94, there were gradual increases in the proportion of students with Individualized Education Programs (IEPs) in small rural districts, as elsewhere.[22]

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[21] If the definition of small rural education were expanded to include large rural districts with a majority of small schools, the total number of students in small rural districts would be increased by 30 percent, but there would be few differences in the findings. Under the expanded definition, the percentage of minority students would be 13 percent rather than 12 percent; the percentage of African American students in these districts would be 3 percent instead of 2 percent.

[22] With the inclusion of large districts with a majority of small schools, the trends would essentially be the same, although the annual increases in the percentage of students with IEPs would have been more like other districts at 3.1 percent rather than 2.9 percent.

5. Revenues, Expenditures, and Student/Teacher Ratios in Small Rural School Districts

In 1992-93,[23] revenue per pupil was about $6,200, and expenditures per pupil were about $6,000 in small rural districts, about $200 to $400 more than in large nonrural districts (figures 5.1, 5.2). In rural areas, it was in large districts rather than small districts that revenue and expenditures suffered. Per-pupil spending varied substantially between regions: in the West, small rural districts spent nearly $2,000 per pupil more than other districts did; but in the Midwest, unlike the rest of the country, except perhaps in the Southeast, less was spent in small rural districts than in other districts (table 5.1).

Nearly half the revenue in small rural districts came, each, from local and state sources, with about 7 percent from the federal government (figure 5.5). In large rural districts, by comparison, a much smaller share came from local sources. About two-thirds of the current expenditures in small rural districts were for core instruction, slightly less than elsewhere (figure 5.6). Nevertheless, ratios of students to teachers were lowest in small rural districts, ranging from 12 in top quartile spending districts to 15 in bottom quartile spending districts (figure 5.9).

Adjusted for inflation, trends between 1989-90 and 1992-93 were minor, although there were a few patterns. The slightly greater spending in small rural districts, compared to other districts in 1992-93, was more noticeable than it was 3 years earlier (figure 5.11). In the South Central region, per-pupil revenues in small rural districts rose, but in the Northeast, per-pupil expenditures declined somewhat (table 5.3). In the nation as a whole, however, there were no substantial trends in per-pupil revenue or expenditures or in student/teacher ratios.

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[23] For 1992-93, per pupil revenues and expenditures for 16 percent of small rural districts (and 13 percent of all districts) were imputed, primarily based on data for the same districts in 1991-92, in which fewer than 2 percent were imputed. The same pattern of results held for both 1991-92 and 1992-93.

Background

During most of this century, powerful economic and social changes have taken place in rural America. As the economy has changed so that agriculture no longer is a major source of employment and income, rural areas have experienced an outmigration (DeYoung 1994; Stern 1994). Over the last 30 years, the proportion of the population that is of working age (i.e., 18 to 64) has continued to be higher in metropolitan areas than in rural ones, and the older segment of the population has increased more in rural than in metropolitan areas (Herzog and Pittman 1995). Overall poverty rates in rural areas have historically exceeded those of urban areas of the country; however, in the previous chapter we saw that in the 1990s this rural disadvantage, as felt by small districts, was primarily in the South and West.

Because of these factors, rural districts typically serve poorer populations with greater needs; they exist in areas with lower property values and therefore have a much smaller tax base for local educational funding; and they often do not have the requisite funding to provide more than the most basic educational program for their students. As a result, they have been continually encouraged to consolidate as a response to funding limitations and inadequate educational services (Bass 1990; Thompson 1990; DeYoung 1994; Verstegen 1990). In fact, school and district consolidations have been the single policy option used throughout the 20th century to try to achieve cost savings and improve education in rural districts (Stephens 1988). On the other hand, many small rural districts and schools offer environments that educational reformers have recently touted as effective for fostering positive student outcomes. These aspects include strong school and community partnerships, decentralized governance structures, low student/teacher ratios, and cultures characterized as adaptive, flexible, and innovative in providing educational services with limited resources (Haas and Lambert 1995; Stern 1995).

According to Stern (1994), rural residents pay a greater than average share of their income for schooling, even though poverty is high in rural areas (one-quarter of rural children lived in poverty in 1986). Furthermore, previous research has shown a systematic effect of rural location on public school spending (Parrish, Matsumoto, and Fowler 1995) even after adjusting for varying costs and needs across school districts. As for sources of funding, Parrish, Matsumoto, and Fowler (1995) also documented discrepancies in expenditures across districts.

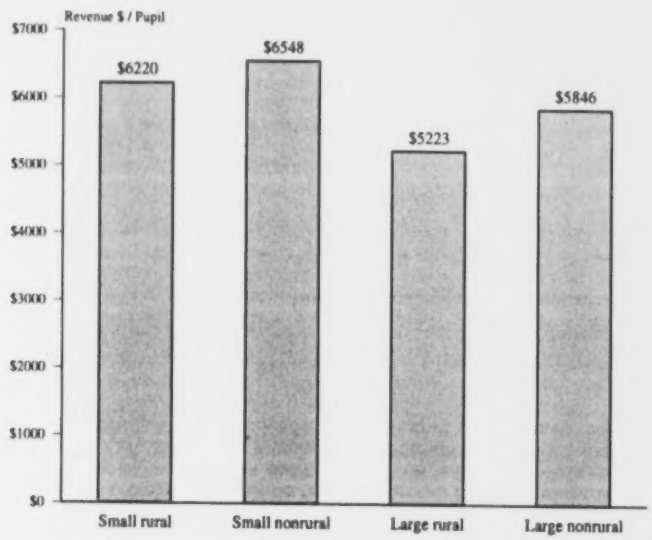
In this chapter, questions are addressed concerning whether size and characteristics of small rural districts are translated into lower per-pupil revenues and expenditures and higher student/teacher ratios. By setting a higher local funding priority on education and by using extra state and federal funds targeted to help rural areas, is it possible for small rural districts to achieve the same levels of resources as other districts? To what extent do they obtain revenues from state and federal governments; and to what extent do their expenditures focus on core instructional costs?

Revenues, Expenditures and Student/Teacher Ratios in Small Rural School Districts in 1992-93

Per-Pupil Revenues and Expenditures. School districts annually report both revenues and expenditures to NCES as part of the F-33 Census of Governments. Although revenues and expenditures, in aggregate, should conform to very similar patterns across school districts as these districts respond to budget balancing pressures, they are analyzed differently—revenues in terms of sources (local, state, and federal) and expenditures in terms of school processes (instruction, support, and capital outlays). These data can be used to portray the financial status of small rural school districts and how they differ from other districts.

As can be seen in figures 5.1 and 5.2, both revenues and expenditures per pupil were greater in small districts than in large districts but less in rural districts than in nonrural districts. As a result of the offsetting combination of these two factors, average revenues and expenditures per pupil were higher in small rural districts than in large nonrural districts (revenues by $374/pupil and expenditures by $207/pupil). Thus, even though the percentages of students living in poverty were greater in small rural districts in some regions of the nation, public school finances in the *small* districts in rural areas were not significantly depressed.[24] In rural areas, it is the *large* districts that lag substantially in revenues and expenditures per pupil.

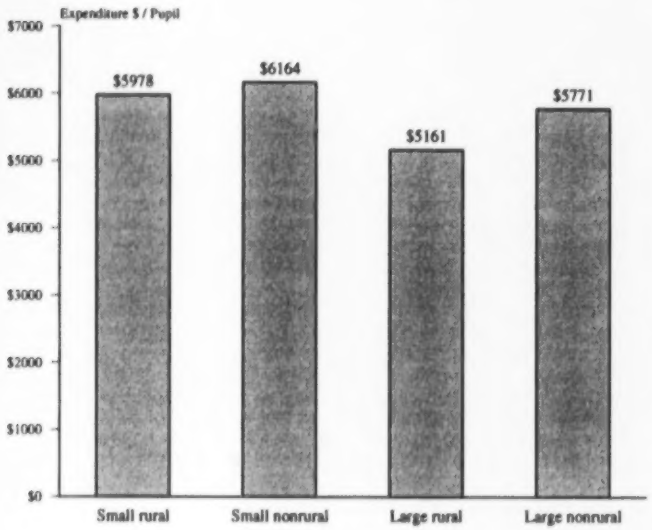
Figure 5.1. Average per-pupil revenues in small rural and other school districts in 1992-93



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data; Bureau of the Census, F-33 Survey of Local Governments

[24] These comparisons do not take into account either different prices paid for educational resources (e.g., teacher salaries) or different resource needs (e.g., transportation costs). However, an auxiliary analysis was carried out adjusting revenues and expenditures for the district Teacher Cost Index developed by Chambers (1995). The results of those analyses indicated that salaries for comparably qualified teachers were lower in small rural districts than elsewhere.

Figure 5.2. Average per-pupil expenditures in small rural and other school districts in 1992-93



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data; Bureau of the Census, F-33 Survey of Local Governments

Another way to look at per-pupil revenues and expenditures is to divide the public school districts in the nation into high (top 25 percent), medium, and low (bottom 25 percent) revenue and expenditure districts. The question concerns the extent to which the high versus low revenue and expenditure districts are small and rural. What percentage of small rural district students attend schools in top and bottom quartile districts? The results shown in figures 5.3 and 5.4 indicate that in 1992-93, the distributions of students in top and bottom quartile districts were not very different from most school districts: about 23 percent of students in small rural districts were in districts in the top quartile. Large rural districts, on the other hand, were much more likely to have low per-pupil revenues and expenditures than other districts. Only 8.1 percent of students in large rural districts were in top quartile districts on revenue, only 9.5 percent on expenditure.

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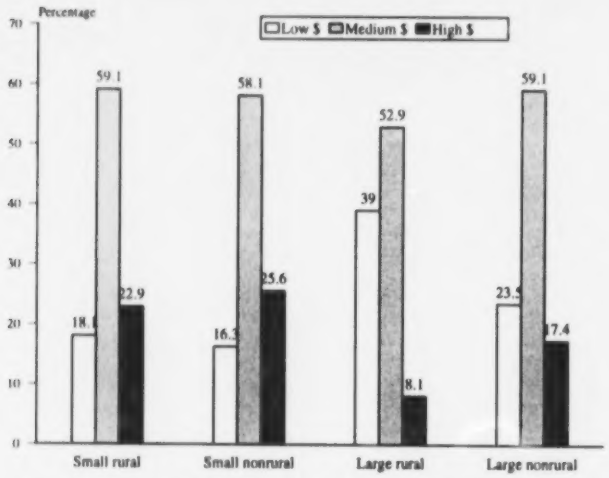
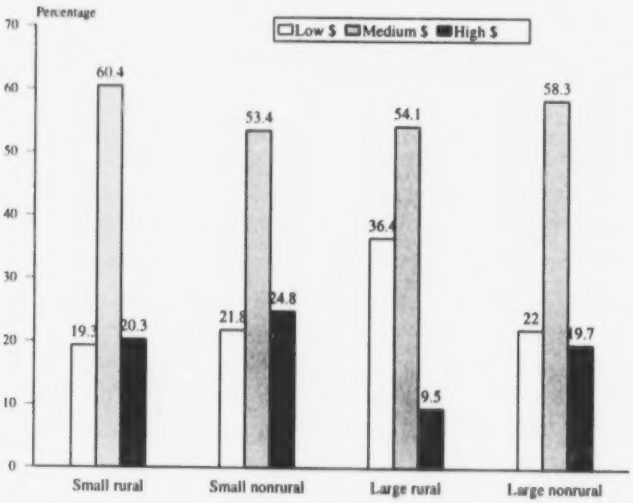
Figure 5.3. **Percentages of students in small rural and other school districts with low, medium, and high per-pupil revenues in 1992-93**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data; Bureau of the Census, F-33 Survey of Local Government

Figure 5.4. **Percentages of students in small rural and other school districts with low, medium, and high per-pupil expenditures in 1992-93**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data; Bureau of the Census, F-33 Survey of Local Governments

Regional Variation. There are substantial regional variations in per-pupil revenues, and similarly in per-pupil expenditures. However, the patterns of variation are different in small rural districts, when compared to all other districts in the region. As shown in table 5.1, small rural districts fare best on this criterion in the West: when compared to their larger and nonrural counterparts, they spend nearly $2,000 more per student. Less striking, but still substantial, are the differences between the Midwest and the rest of the country. In the Midwest, where there are more small rural districts than in any other region, these districts are able to spend less per student than larger or nonrural districts. In the other three regions of the country, revenues and expenditures per-pupil are greater in small rural districts than in other districts.[25]

Table 5.1. Per-pupil revenues and expenditures in small rural districts, compared to all other districts, by region, in 1992-93

Region	Small Rural Districts	All Other Districts
Revenues per pupil		
Northeast	$8,589	$7,980
Southeast	--	$5,026
South Central	$6,590	$5,374
Midwest	$5,427	$5,755
West	$7,058	$5,150
Expenditures per pupil		
Northeast	$8,204	$7,850
Southeast	--	$4,965
South Central	$5,369	$4,902
Midwest	$5,587	$5,763
West	$7,006	$5,204

Source: U.S. Department of Education, National Center for Education Statistics, Common Core of Data; Bureau of the Census, F-33 Survey of Local Government

Note: -- There were too few small rural districts in the Southeast to compute a reliable estimate.

Although they are not attributable to any single large state in a region, regional variations reflect substantial state-to-state differences in per-pupil revenues and expenditures, which are presented in tables A5.3b and A5.8b in appendix A. In 15 states, the average per-pupil revenues in small rural districts in 1992-93 were at least $1,000 more than the overall average for all districts in the state: in the West, Alaska, Washington, Idaho, Wyoming, Utah, Nevada, California, Arizona, New Mexico, and Texas; in the Northeast, New Jersey, Connecticut, Rhode Island, New Hampshire, and Maine. On the other hand, in the Midwestern states of Illinois, Missouri, Kentucky, Tennessee, Ohio, and Michigan, per-pupil revenues were at least $500 less in small rural districts than in other districts. Regional clustering of the states where small rural districts have higher and lower revenues per-pupil is striking. Further research is needed to understand state-to-state variation in the funding of small rural districts.

[25] The expenditure differential in the Southeast is based on too few small rural districts (n=16) to be reliable. As shown in appendix B, however, when all unified districts with high school enrollments of less than 100 per grade are considered small, the mean per-pupil revenue and expenditures in small rural districts in the Southeast were both about $100 less than in other districts in the Southeast.

Grade Level Variations. Greater per-pupil expenditures are generally thought to be required for a quality high school education than for elementary school, and information on the relative size of the differential in small rural districts as compared to other districts can shed light on the ways resources are allocated in rural areas. However, because the Common Core of Data financial information is only available at the district level, the comparison of costs at elementary and secondary levels can only be based on the relatively small number of separate elementary and secondary districts. Based on this subset of districts, small rural secondary districts have per-pupil revenues of $556 and per-pupil expenditures of $1,199 more than small rural elementary districts, as shown in table 5.2. Generally, small rural *elementary* districts outspend other elementary districts by roughly $1,000 per-pupil; while secondary and unified small rural districts only outspend their larger, nonrural counterparts by $100 to $300 per pupil on average.[26]

Table 5.2. Per-pupil revenues and expenditures in small rural districts, compared to all other districts, by grade level served, in 1992-93

Region	Small rural Districts	All Other Districts
Revenues per pupil		
Elementary	$6,917	$5,608
Unified	$6,104	$5,753
Secondary	$7,473	$7,369
Expenditures per pupil		
Elementary	$6,369	$5,470
Unified	$5,876	$5,683
Secondary	$7,568	$7,286

Source: U.S. Department of Education, National Center for Education Statistics, Common Core of Data; Bureau of the Census, F-33 Survey of Local Governments.

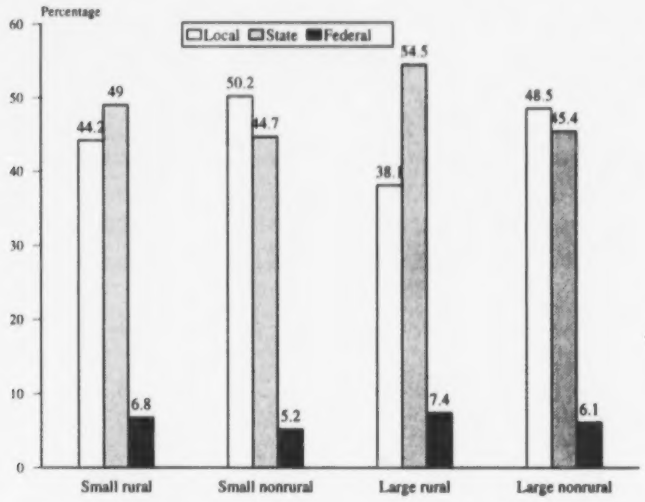
Revenue Sources. Revenues for public schools come essentially from three sources: local government, state government, and the federal government. As shown in figure 5.5, the share of revenues in small rural districts from state and local sources were each between 40 and 50 percent in 1992-93, with a 6 to 7 percent share from federal programs. These percentages are about the same as percentages in other districts. In rural areas, it is the large districts, which have greater poverty and lower overall revenues, that rely on state and federal sources for a larger share of their revenue.

Expenditure Allocations. Just as there were small but noticeable differences in revenue sources between small and large rural and nonrural districts, there were also small but noticeable differences in the allocation of expenditures for different purposes. On the Bureau of Census F-33 form, which provides school district financial data for the Common Core of Data, total expenditures were reported, as were the subset of those expenditures that were current expenditures and the subset

[26] There is an apparent paradox in table 5.2, that small rural unified districts, which combine elementary and secondary education, have lower per-pupil revenues and expenditures than elementary districts. This reflects the combined effects of regional variation in the prevalence of elementary districts (see table A2.3b in appendix A) and in average spending. There were relatively larger percentages of elementary districts, compared to unified districts, among small rural districts in regions with relatively higher spending: the Northeast and West.

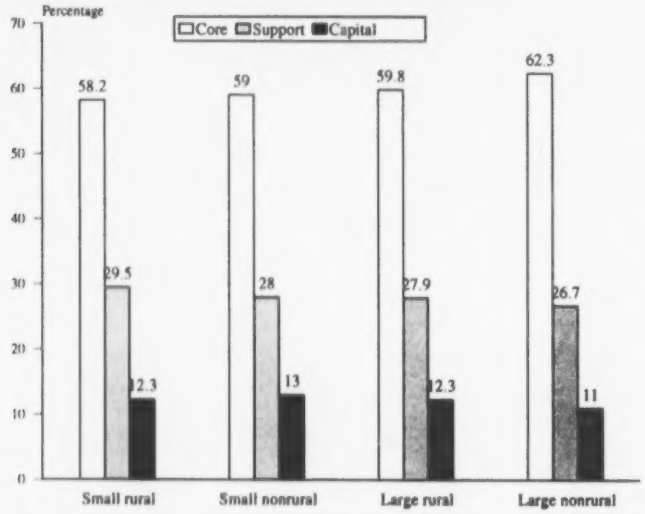
of current expenditures that were for core instructional services (see figure 5.6). A shorthand way of looking at this is to think of "current expenditures not for core instruction" as support expenditures, and "non-current expenditures" as capital expenditures.

Figure 5.5. **Percentages of revenues in small rural and other school districts from local, state, and federal sources in 1992-93**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data; Bureau of the Census, F-33 Survey of Local Governments

Figure 5.6. **Percentages of expenditures in small rural and other school districts for core instruction, administrative support, and capital outlays in 1992-93**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data; Bureau of the Census, F-33 Survey of Local Governments

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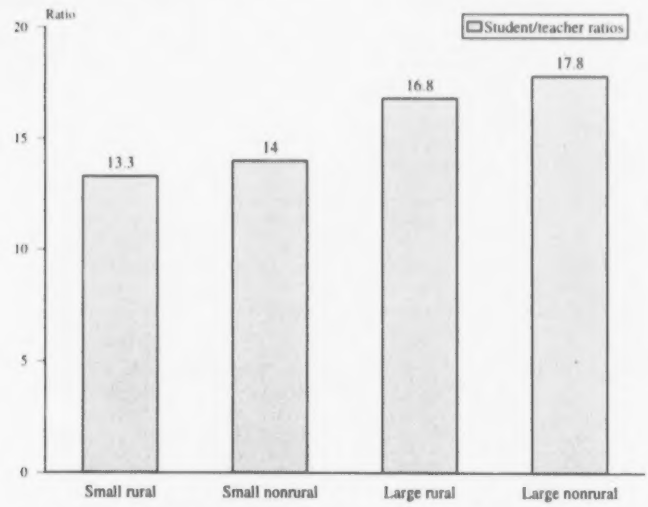
In 1992-93, expenditures were allocated roughly the same across types of districts—about 62 percent for core instruction, 27 percent for support, and 11 percent for capital outlay. However, there was a tendency for large nonrural districts to allocate somewhat more for core instruction, and as a result, small rural districts were spending less of their funds on core instruction than large nonrural districts (58.2 percent versus 62.3 percent).

Student/Teacher Ratios. The most important resource purchased by schools is teachers' time, and small rural districts differ from other districts both in terms of the characteristics of their teaching force and the numbers of students for which each teacher is responsible. Ballou and Podgursky (1996) have reported analyses of the Schools and Staffing Survey (SASS) which indicate that, in a representative sample of rural and small town schools, teachers on average earn less and have less formal education and experience than teachers in nonrural schools. On the other hand, as shown in figure 5.7, small rural districts had lower student/teacher ratios in 1993-94 than other districts. The effects of district size are substantial—average student/teacher ratios are about 14 in small districts and 17 in large districts. Thus, there appears to be a trade-off between quality, as measured by formal teacher qualifications, and quantity, as measured by the "share" of each teacher available to a student, between small rural districts and large nonrural districts.

Figure 5.7. Average student/teacher ratios in small rural and other school districts in 1992-93

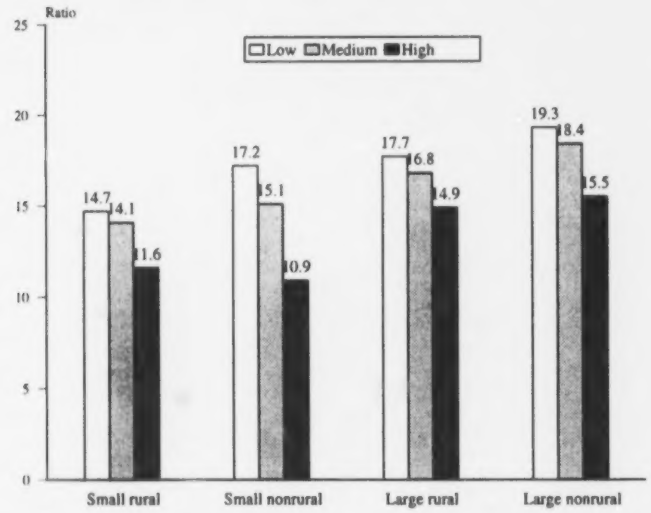


SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data; Bureau of the Census, F-33 Survey of Local Governments

Differences in average student/teacher ratios are associated with differences in per-pupil revenues and expenditures, as shown in figures 5.8 and 5.9. Small rural districts in the top quartile of per-pupil revenues and expenditures had only about 12 students per teacher, compared to a 15-to-1 ratio in the bottom quartile. This is not surprising, because the largest component of school expenditures is for teachers. However, it does show that in small rural districts, as elsewhere, real

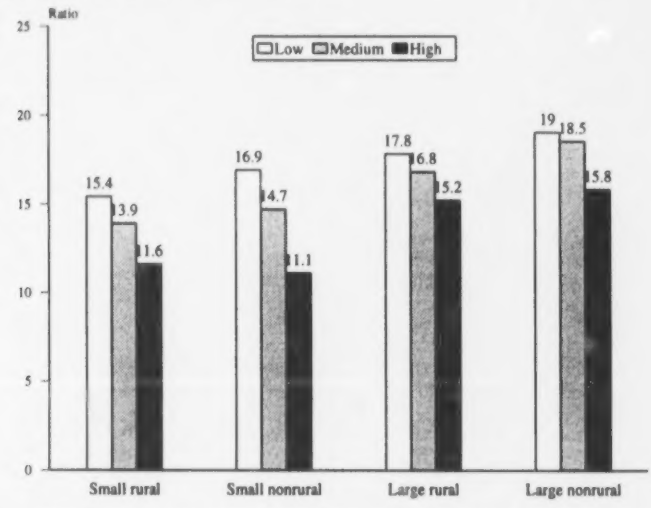
resources are related to funding levels. The relationship between school size and student/teacher ratios appears as strong as between funding levels and these ratios: small rural districts in the bottom quartile on spending per pupil had lower student/teacher ratios than large nonrural districts in the top quartile.

Figure 5.8. **Average student/teacher ratios in small rural and other school districts with low, medium, and high per-pupil revenues in 1992-93**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data; Bureau of the Census, F-33 Survey of Local Governments

Figure 5.9. **Average student/teacher ratios in small rural and other school districts with low, medium, and high per-pupil expenditures in 1992-93**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data; Bureau of the Census, F-33 Survey of Local Governments

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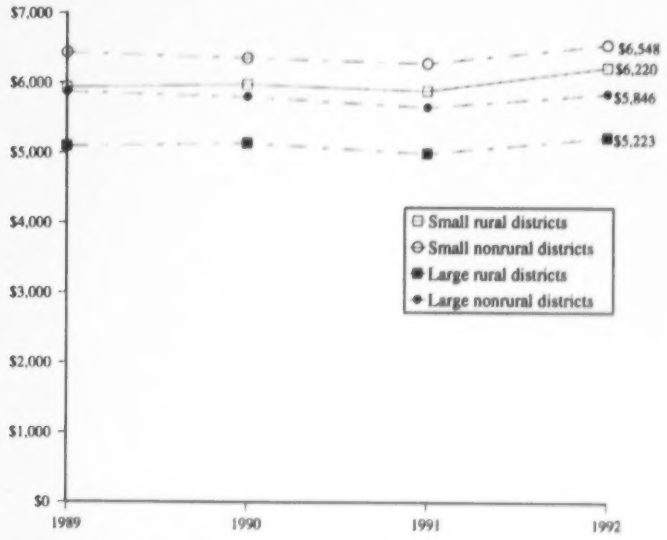
Trends in Revenues, Expenditures, and Student/Teacher Ratios in Small Rural School Districts between 1989-90 and 1992-93

Per-pupil revenue and expenditure in current dollars tend to increase with the inflation rate, and a correction has been applied to these data so that all years are measured in constant dollars, set to the value in 1992-93.[27] Once corrected for inflation, per-pupil revenues and expenditures exhibited very little change in small rural districts between 1989-90 and 1992-93. As can be seen in figure 5.10, in all 4 years, revenues per student in small rural districts were slightly greater than in large nonrural districts, substantially greater than those of large rural districts, and somewhat less than in small nonrural districts.

Figure 5.10. **Trends in per-pupil revenues in small rural and other school districts between 1989-1990 and 1992-93 (in constant 1992-93 dollars)**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data; Bureau of the Census, F-33 Survey of Local Government

The average per-pupil expenditure in small rural schools, adjusted for inflation, varied only between $5,950 and $6,120 during these four years. Trends in average per-pupil expenditures in small rural districts are compared with trends in other districts in figure 5.11. (The complete data are shown in table A5.7 in the appendix.) The difference favoring small rural districts over large nonrural districts increased from $13 in 1989-90 to $207 in 1992-93 (see table A5.7), as much because spending in large nonrural districts did not keep up with inflation as that spending increased in small rural districts.

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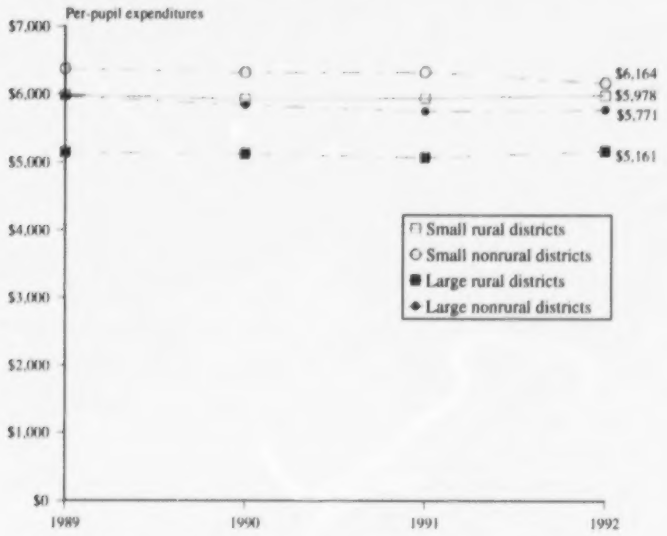
[27] The annual inflation ratios used were 1.054 for 1989-90 to 1990-91, 1.042 for 1990-91 to 1991-92, and 1.030 for 1991-92 to 1992-93.

Figure 5.11. Trends in per-pupil expenditures in small rural and other school districts between 1989-90 and 1992-93 (in constant 1992-93 dollars)



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data; Bureau of the Census, F-33 Survey of Local Governments

Regional Variation. As shown in table 5.3, gains in per-pupil spending varied by region. Small rural districts in the Northeast, which in 1989-90 had the highest per-pupil expenditures, lost ground over this period as did other districts in the Northeast, but as shown in table A5.8 they still remained the highest spending region in 1992-93.[28]

Table 5.3. Per-pupil expenditure gains in small rural districts, compared to all other districts, by region, from 1989-90 to 1992-93 (in constant 1992-93 dollars)

Region	Small rural Districts	All Other Districts
Gain in expenditures per pupil		
Northeast	– $548	– $325
Southeast	--	– $315
South Central	$48	$19
Midwest	$113	$107
West	– $315	– $250

Source: U.S. Department of Education, National Center for Education Statistics, Common Core of Data; Bureau of the Census, F-33 Survey of Local Governments.

Note: -- There were too few small rural districts in the Southeast to support a reliable estimate.

[28] An examination of regional CPI measures indicates that this differential loss, in comparison to other regions, is not a reflection of differential inflation rates. Although there were too few small rural districts in the Southeast for reliable estimation, when unified districts with fewer than 100 students per high school grade were included in the definition of "small districts" (see appendix B), there was a gain of about $250 in per-pupil expenditures in small rural districts in the Southeast over this period

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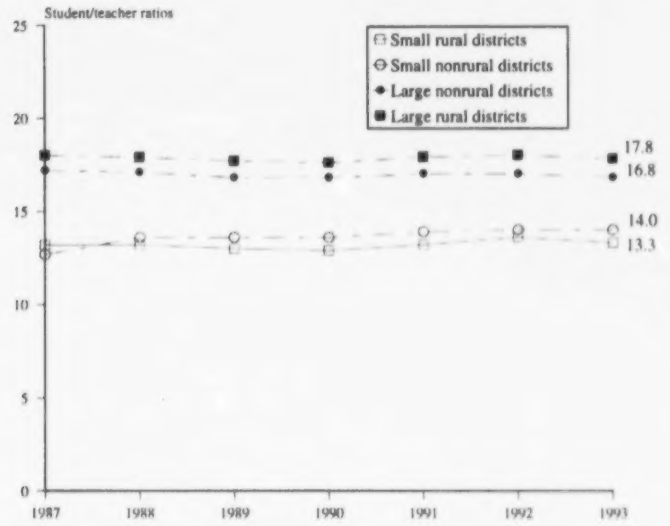
Student/Teacher Ratios. On a nationwide basis, changes in per-pupil revenues and expenditures in small rural districts over this time period were relatively minor, and that is reflected in the lack of changes in student/teacher ratios, shown in figure 5.12. Average student/teacher ratios in small rural districts remained at about 13 throughout the period from 1986-87 to 1993-94, while, for example, the average ratios in large nonrural districts remained at about 18.

Figure 5.12. Trends in student/teacher ratios in small rural and other school districts between 1986-87 and 1993-94



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data; Bureau of the Census, F-33 Survey of Local Governments

Summary

Focusing the snapshot of small rural school districts in 1992-93 on revenue, expenditures, and student/teacher ratios in those districts reveals the following patterns.

> Revenue per pupil was about $6,200, and expenditures per pupil were about $6,000 in small rural districts, about $200 to $400 more than in large nonrural districts. In rural areas, it was in large districts rather than small districts that revenue and expenditures suffered, relative to nonrural districts. Per-pupil spending varied substantially between regions: in the West, small rural districts spent nearly $2,000 per pupil more than other districts did; but in the Midwest, unlike the rest of the country, less was spent in small rural districts than elsewhere.

> Nationally, 93 percent of the revenue in small rural districts came almost equally from local sources (44 percent) and state sources (49 percent), with about 7 percent from the federal government. In large rural districts, by comparison, a much smaller share came from local sources. About two-thirds of the current expenditures in small rural districts were for core instruction, slightly less than elsewhere. Nevertheless, ratios of students to teachers were lowest in small rural districts, ranging from 12 in top spending districts to 15 in bottom spending districts.[29]

Extending this picture to longitudinal trends over the preceding 3 years does not reveal a great deal of additional information. Adjusted for inflation, trends are minor, although there were a few patterns.

> The slightly greater spending in small rural districts, compared to other districts in 1992-93, grew from essentially no difference 3 years earlier. In the South Central region, per-pupil revenues in small rural districts increased, but in the Northeast, per-pupil expenditures declined somewhat. As a national average, however, there were no substantial changes in per-pupil revenue or expenditures or in student/teacher ratios.[30]

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[29] Including large rural districts with a majority of small schools in the small rural category had little effect on the results. Average spending in the expanded set of small rural districts was about $100 to $150 less per-pupil but still slightly higher than in other districts. Generally, summary figures for small rural districts were, as expected, slightly closer to figures for large rural districts.

[30] Trends were not substantially affected by the inclusion of large rural districts with a majority of small schools. For example, over the three-year period there was a negligible average loss of $50 in per-pupil expenditures in the expanded set of small rural districts, compared to $200 in large nonrural districts. The corresponding loss for the originally defined small rural districts was negligible ($6).

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Appendix A. Tables Section

Table A2.1. Number of rural, small, and other school districts, by level and year

	Total				Rural				Nonrural			
	Total	Elem	Unified	Second	Total	Elem	Unified	Second	Total	Elem	Unified	Second
Total												
1986-87	15,345	3,824	10,879	642	7,409	1,919	5,229	261	7,936	1,905	5,650	381
1987-88	15,273	3,772	10,861	640	7,387	1,905	5,223	259	7,886	1,867	5,638	381
1988-89	15,199	3,716	10,846	637	7,353	1,880	5,215	258	7,846	1,836	5,631	379
1989-90	15,113	3,652	10,825	636	7,305	1,843	5,204	258	7,808	1,809	5,621	378
1990-91	15,035	3,599	10,806	630	7,260	1,809	5,198	253	7,775	1,790	5,608	377
1991-92	14,956	3,537	10,789	630	7,207	1,773	5,183	251	7,749	1,764	5,606	379
1992-93	14,820	3,436	10,748	636	7,091	1,704	5,136	251	7,729	1,732	5,612	385
1993-94	14,648	3,334	10,683	631	6,979	1,645	5,085	249	7,669	1,689	5,598	382
Small												
1986-87	5,679	2,217	3,192	270	4,653	1,529	2,906	218	1,026	688	286	52
1987-88	5,608	2,171	3,170	267	4,626	1,515	2,895	216	982	656	275	51
1988-89	5,543	2,125	3,155	263	4,593	1,491	2,887	215	950	634	268	48
1989-90	5,469	2,073	3,133	263	4,546	1,458	2,873	215	923	615	260	48
1990-91	5,402	2,023	3,120	259	4,505	1,425	2,868	212	897	598	252	47
1991-92	5,333	1,970	3,106	257	4,457	1,394	2,852	211	876	576	254	46
1992-93	5,204	1,888	3,057	259	4,351	1,339	2,802	210	853	549	255	49
1993-94	5,052	1,809	2,986	257	4,238	1,290	2,740	208	814	519	246	49
Large												
1986-87	9,666	1,607	7,687	372	2,756	390	2,323	43	6,910	1,217	5,364	329
1987-88	9,665	1,601	7,691	373	2,761	390	2,328	43	6,904	1,211	5,363	330
1988-89	9,656	1,591	7,691	374	2,760	389	2,328	43	6,896	1,202	5,363	331
1989-90	9,644	1,579	7,692	373	2,759	385	2,331	43	6,885	1,194	5,361	330
1990-91	9,633	1,576	7,686	371	2,755	384	2,330	41	6,878	1,192	5,356	330
1991-92	9,623	1,567	7,683	373	2,750	379	2,331	40	6,873	1,188	5,352	333
1992-93	9,616	1,548	7,691	377	2,740	365	2,334	41	6,876	1,183	5,357	336
1993-94	9,596	1,525	7,697	374	2,741	355	2,345	41	6,855	1,170	5,352	333

Table A2.2. Number of students (in thousands) enrolled in rural, small, and other school districts, by level and year

	Total				Rural				Nonrural			
	Total	Elem	Unified	Second	Total	Elem	Unified	Second	Total	Elem	Unified	Second
Total												
1986-87	39,588	2,165	36,404	1,019	5,400	272	5,064	64	34,188	1,893	31,340	955
1987-88	39,751	2,207	36,555	989	5,398	281	5,054	63	34,353	1,926	31,501	926
1988-89	39,941	2,260	36,724	957	5,410	282	5,067	61	34,531	1,978	31,657	896
1989-90	40,311	2,339	37,026	946	5,423	286	5,077	60	34,888	2,053	31,949	886
1990-91	40,971	2,426	37,590	955	5,454	293	5,103	58	35,517	2,133	32,487	897
1991-92	41,811	2,484	38,342	985	5,534	297	5,177	60	36,277	2,187	33,165	925
1992-93	42,571	2,526	39,028	1,017	5,629	297	5,267	65	36,942	2,229	33,761	952
1993-94	43,196	2,562	39,600	1,034	5,710	294	5,346	70	37,486	2,268	34,254	964
Small												
1986-87	1,294	164	1,087	43	1,123	107	987	29	171	57	100	14
1987-88	1,276	159	1,076	41	1,113	104	981	28	163	55	95	13
1988-89	1,291	179	1,071	41	1,109	106	976	27	182	73	95	14
1989-90	1,293	185	1,068	40	1,109	107	975	27	184	78	93	13
1990-91	1,293	188	1,066	39	1,107	108	973	26	186	80	93	13
1991-82	1,309	190	1,078	41	1,119	109	982	28	190	81	96	13
1992-93	1,325	191	1,088	46	1,131	109	990	32	194	82	98	14
1993-94	1,327	190	1,087	50	1,131	107	988	36	196	83	99	14
Large												
1986-87	38,294	2,001	35,317	976	4,277	165	4,077	35	34,017	1,836	31,240	941
1987-88	38,475	2,048	35,479	948	4,285	177	4,073	35	34,190	1,871	31,406	913
1988-89	38,650	2,081	35,653	916	4,301	176	4,091	34	34,349	1,905	31,562	882
1989-90	39,018	2,154	35,958	906	4,314	179	4,102	33	34,704	1,975	31,856	873
1990-91	39,678	2,238	36,524	916	4,347	185	4,130	32	35,331	2,053	32,394	884
1991-92	40,502	2,294	37,264	944	4,415	188	4,195	32	36,087	2,106	33,069	912
1992-93	41,246	2,335	37,940	971	4,498	188	4,277	33	36,748	2,147	33,663	938
1993-94	41,869	2,372	38,513	984	4,579	187	4,358	34	37,290	2,185	34,155	950

Table A2.3a. Number of rural, small, and other school districts, by region and year

	Total			Rural			Nonrural		
	Total	Small	Large	Total	Small	Large	Total	Small	Large
Northeast									
1986-87	2,971	589	2,382	805	419	386	2,166	170	1,996
1987-88	2,969	587	2,382	807	420	387	2,162	167	1,995
1988-89	2,963	584	2,379	806	419	387	2,157	165	1,992
1989-90	2,959	580	2,379	804	417	387	2,155	163	1,992
1990-91	2,959	579	2,380	805	417	388	2,154	162	1,992
1991-92	2,958	576	2,382	803	415	388	2,155	161	1,994
1992-93	2,957	574	2,383	801	412	389	2,156	162	1,994
1993-94	2,948	568	2,380	796	408	388	2,152	160	1,992
Southeast									
1986-87	1,387	31	1,356	532	19	513	855	12	843
1987-88	1,380	29	1,351	531	17	514	849	12	837
1988-89	1,379	28	1,351	531	17	514	848	11	837
1989-90	1,373	27	1,346	530	16	514	843	11	832
1990-91	1,373	26	1,347	530	16	514	843	10	833
1991-92	1,375	32	1,343	531	17	514	844	15	829
1992-93	1,369	32	1,337	529	17	512	840	15	825
1993-94	1,353	27	1,326	527	16	511	826	11	815
South Central									
1986-87	2,013	1,041	972	1,178	879	299	835	162	673
1987-88	2,003	1,030	973	1,174	874	300	829	156	673
1988-89	1,999	1,026	973	1,172	872	300	827	154	673
1989-90	1,991	1,018	973	1,166	866	300	825	152	673
1990-91	1,974	1,001	973	1,156	856	300	818	145	673
1991-92	1,948	977	971	1,141	841	300	807	136	671
1992-93	1,935	964	971	1,130	830	300	805	134	671
1993-94	1,915	944	971	1,116	815	301	799	129	670
Midwest									
1986-87	5,981	2,707	3,274	3,409	2,275	1,134	2,572	432	2,140
1987-88	5,930	2,656	3,274	3,393	2,261	1,132	2,537	395	2,142
1988-89	5,878	2,607	3,271	3,367	2,236	1,131	2,511	371	2,140
1989-90	5,830	2,555	3,275	3,338	2,204	1,134	2,492	351	2,141
1990-91	5,779	2,514	3,265	3,311	2,181	1,130	2,468	333	2,135
1991-92	5,736	2,474	3,262	3,280	2,152	1,128	2,456	322	2,134
1992-93	5,644	2,381	3,263	3,198	2,078	1,120	2,446	303	2,143
1993-94	5,555	2,289	3,266	3,128	2,003	1,125	2,427	286	2,141
West									
1986-87	2,993	1,311	1,682	1,485	1,061	424	1,508	250	1,258
1987-88	2,991	1,306	1,685	1,482	1,054	428	1,509	252	1,257
1988-89	2,980	1,298	1,682	1,477	1,049	428	1,503	249	1,254
1989-90	2,960	1,289	1,671	1,467	1,043	424	1,493	246	1,247
1990-91	2,950	1,282	1,668	1,458	1,035	423	1,492	247	1,245
1991-92	2,939	1,274	1,665	1,452	1,032	420	1,487	242	1,245
1992-93	2,915	1,253	1,662	1,433	1,014	419	1,482	239	1,243
1993-94	2,877	1,224	1,653	1,412	996	416	1,465	228	1,237

Table A2.3b. Counts of small rural and other districts at each grade level

	Total				Small Rural				Other			
	Tot	Elem	Unified	Sec	Tot	Elem	Unified	Sec	Tot	Elem	Unified	Sec
United States												
1986-87	15,345	3,824	10,879	642	4,653	1,529	2,906	218	10,692	2,295	7,973	424
1987-88	15,273	3,772	10,861	640	4,626	1,515	2,895	216	10,647	2,257	7,966	424
1988-89	15,199	3,716	10,846	637	4,593	1,491	2,887	215	10,606	2,225	7,959	422
1989-90	15,113	3,652	10,825	636	4,546	1,458	2,873	215	10,567	2,194	7,952	421
1990-91	15,035	3,599	10,806	630	4,505	1,425	2,868	212	10,530	2,174	7,938	418
1991-92	14,956	3,537	10,789	630	4,457	1,394	2,852	211	10,499	2,143	7,937	419
1992-93	14,820	3,436	10,748	636	4,351	1,339	2,802	210	10,469	2,097	7,946	426
1993-94	14,648	3,334	10,683	631	4,238	1,290	2,740	208	10,410	2,044	7,943	423
Northeast												
1986-87	2,971	884	1,948	139	419	261	149	9	2,552	623	1,799	130
1987-88	2,969	882	1,946	141	420	264	147	9	2,549	618	1,799	132
1988-89	2,963	878	1,942	143	419	264	146	9	2,544	614	1,796	134
1989-90	2,959	875	1,941	143	417	262	146	9	2,542	613	1,795	134
1990-91	2,959	876	1,940	143	417	262	146	9	2,542	614	1,794	134
1991-92	2,958	870	1,941	147	415	260	145	10	2,543	610	1,796	137
1992-93	2,957	864	1,939	154	412	257	144	11	2,545	607	1,795	143
1993-94	2,948	860	1,935	153	408	255	142	11	2,540	605	1,793	142
Southeast												
1986-87	1,387	30	1,353	4	19	1	18	0	1,368	29	1,335	4
1987-88	1,380	30	1,346	4	17	1	16	0	1,363	29	1,330	4
1988-89	1,379	30	1,346	3	17	1	16	0	1,362	29	1,330	3
1989-90	1,373	30	1,340	3	16	1	15	0	1,357	29	1,325	3
1990-91	1,373	32	1,337	4	16	1	15	0	1,357	31	1,322	4
1991-92	1,375	32	1,339	4	17	1	16	0	1,358	31	1,323	4
1992-93	1,369	31	1,334	4	17	1	16	0	1,352	30	1,318	4
1993-94	1,353	31	1,318	4	16	1	15	0	1,337	30	1,303	4
South Central												
1986-87	2,013	241	1,772	0	879	134	745	0	1,134	107	1,027	0
1987-88	2,003	237	1,766	0	874	132	742	0	1,129	105	1,024	0
1988-89	1,999	234	1,765	0	872	130	742	0	1,127	104	1,023	0
1989-90	1,991	232	1,759	0	866	128	738	0	1,125	104	1,021	0
1990-91	1,974	223	1,751	0	856	121	735	0	1,118	102	1,016	0
1991-92	1,948	212	1,736	0	841	115	726	0	1,107	97	1,010	0
1992-93	1,935	206	1,729	0	830	112	718	0	1,105	94	1,011	0
1993-94	1,915	192	1,723	0	815	104	711	0	1,100	88	1,012	0
Midwest												
1986-87	5,981	1,322	4,488	171	2,275	606	1,616	53	3,706	716	2,872	118
1987-88	5,930	1,286	4,478	166	2,261	599	1,611	51	3,669	687	2,867	115
1988-89	5,878	1,248	4,467	163	2,236	582	1,604	50	3,642	666	2,863	113
1989-90	5,830	1,210	4,459	161	2,204	560	1,595	49	3,626	650	2,864	112
1990-91	5,779	1,170	4,452	157	2,181	541	1,593	47	3,598	629	2,859	110
1991-92	5,736	1,137	4,445	154	2,152	520	1,587	45	3,584	617	2,858	109
1992-93	5,644	1,076	4,414	154	2,078	489	1,546	43	3,566	587	2,868	111
1993-94	5,555	1,035	4,368	152	2,003	468	1,494	41	3,552	567	2,874	111
West												
1986-87	2,993	1,347	1,318	328	1,061	527	378	156	1,932	820	940	172
1987-88	2,991	1,337	1,325	329	1,054	519	379	156	1,937	818	946	173
1988-89	2,980	1,326	1,326	328	1,049	514	379	156	1,931	812	947	172
1989-90	2,960	1,305	1,326	329	1,043	507	379	157	1,917	798	947	172
1990-91	2,950	1,298	1,326	326	1,035	500	379	156	1,915	798	947	170
1991-92	2,939	1,286	1,328	325	1,032	498	378	156	1,907	788	950	169
1992-93	2,915	1,259	1,332	324	1,014	480	378	156	1,901	779	954	168
1993-94	2,877	1,216	1,339	322	996	462	378	156	1,881	754	961	166

Table A2.4a. Number of rural, small, and other school districts in 1993-94, by state

	Total			Rural			Nonrural		
	Total	Small	Large	Total	Small	Large	Total	Small	Large
50 States and D.C.	14,648	5,052	9,596	6,979	4,238	2,741	7,669	814	6,855
Alabama	127	0	127	38	0	38	89	0	89
Alaska	55	37	18	48	37	11	7	0	7
Arizona	216	77	139	89	55	34	127	22	105
Arkansas	313	142	171	199	132	67	114	10	104
California	1,055	271	784	282	147	135	773	124	649
Colorado	176	93	83	116	89	27	60	4	56
Connecticut	166	14	152	25	10	15	141	4	137
Delaware	19	0	19	6	0	6	13	0	13
District of Columbia	1	0	1	0	0	0	1	0	1
Florida	68	1	67	14	0	14	54	1	53
Georgia	181	3	178	66	3	63	115	0	115
Hawaii	1	0	1	0	0	0	1	0	1
Idaho	113	46	67	77	44	33	36	2	34
Illinois	922	261	661	336	203	133	586	58	528
Indiana	292	7	285	111	6	105	181	1	180
Iowa	398	205	193	272	196	76	126	9	117
Kansas	304	168	136	241	161	80	63	7	56
Kentucky	176	13	163	72	6	66	104	7	97
Louisiana	66	0	66	17	0	17	49	0	49
Maine	226	97	129	124	82	42	102	15	87
Maryland	24	0	24	11	0	11	13	0	13
Massachusetts	320	28	292	26	6	20	294	22	272
Michigan	558	102	456	213	80	133	345	22	323
Minnesota	399	166	233	256	156	100	143	10	133
Mississippi	149	2	147	73	2	71	76	0	76
Missouri	537	274	263	360	253	107	177	21	156
Montana	492	387	105	416	369	47	76	18	58
Nebraska	684	621	63	502	484	18	182	137	45
Nevada	17	3	14	9	3	6	8	0	8
New Hampshire	165	57	108	77	45	32	88	12	76
New Jersey	571	70	501	65	21	44	506	49	457
New Mexico	88	37	51	54	37	17	34	0	34
New York	714	142	572	197	97	100	517	45	472
North Carolina	121	0	121	51	0	51	70	0	70
North Dakota	249	217	32	232	217	15	17	0	17
Ohio	611	27	584	228	23	205	383	4	379
Oklahoma	554	357	197	351	294	57	203	63	140
Oregon	278	135	143	104	91	13	174	44	130
Pennsylvania	500	8	492	113	5	108	387	3	384
Rhode Island	36	1	35	3	1	2	33	0	33
South Carolina	95	2	93	33	2	31	62	0	62
South Dakota	174	131	43	149	130	19	25	1	24
Tennessee	138	2	136	45	1	44	93	1	92
Texas	1,048	445	603	566	389	177	482	56	426
Utah	40	5	35	17	5	12	23	0	23
Vermont	250	151	99	166	141	25	84	10	74
Virginia	133	4	129	69	2	67	64	2	62
Washington	297	119	178	175	107	68	122	12	110
West Virginia	55	0	55	32	0	32	23	0	23
Wisconsin	427	110	317	228	94	134	199	16	183
Wyoming	49	14	35	25	12	13	24	2	22

Table A2.4b. Percentage of rural, small, and other school districts in 1993-94, by state

	Total			Rural			Nonrural		
	Total	Small	Large	Total	Small	Large	Total	Small	Large
50 States and D.C.	14,648	34.4	65.5	47.6	28.9	18.7	52.3	5.5	46.7
Alabama	127	0.0	100.0	29.9	0.0	29.9	70.0	0.0	70.0
Alaska	55	67.2	32.7	87.2	67.2	20.0	12.7	0.0	12.7
Arizona	216	35.6	64.3	41.2	25.4	15.7	58.7	10.1	48.6
Arkansas	313	45.3	54.6	63.5	42.1	21.4	36.4	3.1	33.2
California	1,052	25.6	74.3	26.7	13.9	12.7	73.2	11.7	61.5
Colorado	176	52.8	47.1	65.9	50.5	15.3	34.0	2.2	31.8
Connecticut	166	8.4	91.5	15.0	6.0	9.0	84.9	2.4	82.5
Delaware	19	0.0	100.0	31.5	0.0	31.5	68.4	0.0	68.4
District of Columbia	1	0.0	100.0	0.0	0.0	0.0	100.0	0.0	100.0
Florida	68	1.4	98.5	20.5	0.0	20.5	79.4	1.4	77.9
Georgia	181	1.6	98.3	36.4	1.6	34.8	63.5	0.0	63.5
Hawaii	1	0.0	100.0	0.0	0.0	0.0	100.0	0.0	100.0
Idaho	113	40.7	59.2	68.1	38.9	29.2	31.8	1.7	30.0
Illinois	922	28.3	71.6	36.4	22.0	14.4	63.5	6.2	57.2
Indiana	292	2.3	97.6	38.0	2.1	36.0	62.0	0.3	61.6
Iowa	398	51.5	48.4	68.3	49.2	19.0	31.6	2.2	29.3
Kansas	304	55.2	44.7	79.2	52.9	26.3	20.7	2.3	18.4
Kentucky	176	7.3	92.6	40.9	3.4	37.5	59.0	3.9	55.1
Louisiana	66	0.0	100.0	25.7	0.0	25.7	74.2	0.0	74.2
Maine	226	42.9	57.0	54.8	36.2	18.5	45.1	6.6	38.4
Maryland	24	0.0	100.0	45.8	0.0	45.8	54.1	0.0	54.1
Massachusetts	320	8.7	91.2	8.1	1.8	6.2	91.8	6.8	85.0
Michigan	558	18.2	81.7	38.1	14.3	23.8	61.8	3.9	57.8
Minnesota	399	41.6	58.3	64.1	39.0	25.0	35.8	2.5	33.3
Mississippi	149	1.3	98.6	48.9	1.3	47.6	51.0	0.0	51.0
Missouri	537	51.0	48.9	67.0	47.1	19.9	32.9	3.9	29.0
Montana	492	78.6	21.3	84.5	75.0	9.5	15.4	3.6	11.7
Nebraska	684	90.7	9.2	73.3	70.7	2.6	26.6	20.0	6.5
Nevada	17	17.6	82.3	52.9	17.6	35.2	47.0	0.0	47.0
New Hampshire	165	34.5	65.4	46.6	27.2	19.3	53.3	7.2	46.0
New Jersey	571	12.2	87.7	11.3	3.6	7.7	88.6	8.5	80.0
New Mexico	88	42.0	57.9	61.3	42.0	19.3	38.6	0.0	38.6
New York	714	19.8	80.1	27.5	13.5	14.0	72.4	6.3	66.1
North Carolina	121	0.0	100.0	42.1	0.0	42.1	57.8	0.0	57.8
North Dakota	249	87.1	12.8	93.1	87.1	6.0	6.8	0.0	6.8
Ohio	611	4.4	95.5	37.3	3.7	33.5	62.6	0.6	62.0
Oklahoma	554	64.4	35.5	63.3	53.0	10.2	36.6	11.3	25.2
Oregon	278	48.5	51.4	37.4	32.7	4.6	62.5	15.8	46.7
Pennsylvania	500	1.6	98.4	22.6	1.0	21.6	77.4	0.6	76.8
Rhode Island	36	2.7	97.2	8.3	2.7	5.5	91.6	0.0	91.6
South Carolina	95	2.1	97.8	34.7	2.1	32.6	65.2	0.0	65.2
South Dakota	174	75.2	24.7	85.6	74.7	10.9	14.3	0.5	13.7
Tennessee	138	1.4	98.5	32.6	0.7	31.8	67.3	0.7	66.6
Texas	1,048	42.4	57.5	54.0	37.1	16.8	45.9	5.3	40.6
Utah	40	12.5	87.5	42.5	12.5	30.0	57.5	0.0	57.5
Vermont	250	60.4	39.6	66.4	56.4	10.0	33.6	4.0	29.6
Virginia	133	3.0	96.9	51.8	1.5	50.3	48.1	1.5	46.6
Washington	297	40.0	59.9	58.9	36.0	22.8	41.0	4.0	29.6
West Virginia	55	0.0	100.0	58.1	0.0	58.1	41.8	0.0	41.8
Wisconsin	427	25.7	74.2	53.3	22.0	31.3	46.6	3.7	42.8
Wyoming	49	28.5	71.4	51.0	24.4	26.5	48.9	4.0	44.8

Table A2.4c. Percent change in rural, small, and other school districts between 1986 and 1993, by state

	Total			Rural			Nonrural		
	Total	Small	Large	Total	Small	Large	Total	Small	Large
50 States and D.C.	-4.6	-11.1	-0.8	-5.9	-9.0	-0.6	-3.4	-20.7	-0.8
Alabama	-2.4	-100.0	-1.6	-5.0	n/a	-5.0	-1.2	-100.0	0.0
Alaska	1.8	0.0	5.8	2.1	0.0	10.0	0.0	n/a	0.0
Arizona	-0.5	-8.4	4.5	-4.4	-9.9	6.2	2.4	-4.4	3.9
Arkansas	-6.1	-11.3	-1.2	-3.9	-6.4	1.5	-9.6	-47.4	-2.9
California	-2.5	-2.9	-2.4	-1.1	-1.4	-0.8	-3.1	-4.7	-2.7
Colorado	-0.6	-1.1	0.0	-0.9	-1.2	0.0	0.0	0.0	0.0
Connecticut	0.6	0.0	0.6	0.0	0.0	0.0	0.7	0.0	0.7
Delaware	0.0	n/a	0.0	0.0	n/a	0.0	0.0	n/a	0.0
District of Columbia	0.0	n/a	0.0	n/a	n/a	n/a	0.0	n/a	0.0
Florida	1.4	n/a	0.0	0.0	n/a	0.0	1.8	n/a	0.0
Georgia	-2.7	0.0	-2.8	0.0	0.0	0.0	-4.2	n/a	-4.2
Hawaii	0.0	n/a	0.0	n/a	n/a	n/a	0.0	n/a	0.0
Idaho	-1.8	-4.2	0.0	-3.8	-6.4	0.0	2.8	100.0	0.0
Illinois	-7.0	-20.2	-0.5	-11.4	-17.5	0.0	-4.3	-28.4	-0.6
Indiana	-3.7	-50.0	-1.4	0.9	0.0	0.9	-6.3	-87.5	-2.8
Iowa	-9.0	-16.0	0.0	-11.7	-15.9	1.3	-2.4	-18.2	-0.9
Kansas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kentucky	-1.2	0.0	-1.3	0.0	0.0	0.0	-1.9	0.0	-2.1
Louisiana	0.0	n/a	0.0	0.0	n/a	0.0	0.0	n/a	0.0
Maine	-1.4	-1.1	-1.6	-1.6	-1.3	-2.4	-1.0	0.0	-1.2
Maryland	0.0	n/a	0.0	0.0	n/a	0.0	0.0	n/a	0.0
Massachusetts	-4.8	-24.4	-2.4	-16.2	-40.0	-4.8	-3.7	-18.6	-2.2
Michigan	-1.3	-6.5	0.0	-1.4	-3.7	0.0	-1.2	-15.4	0.0
Minnesota	-7.9	-16.2	-0.9	-15.8	-18.8	-10.8	10.8	66.6	8.1
Mississippi	-3.3	-33.4	-2.7	-1.4	0.0	-1.4	-5.0	-100.0	-3.8
Missouri	-1.5	-2.9	0.0	-1.4	-2.0	0.0	-1.7	-12.5	0.0
Montana	-10.8	-10.9	-10.3	-11.4	-10.7	-16.1	-7.4	-14.3	-5.0
Nebraska	-23.3	-24.9	-3.1	-17.2	-17.6	-5.3	-36.2	-42.7	-2.2
Nevada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n/a	0.0
New Hampshire	3.7	1.7	4.8	2.6	2.2	3.2	4.7	0.0	5.5
New Jersey	-0.2	-1.5	0.0	0.0	0.0	0.0	-0.2	-2.0	0.0
New Mexico	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n/a	0.0
New York	-1.3	-7.2	0.3	-2.5	-7.7	3.0	-0.8	-6.3	-0.3
North Carolina	-13.6	-100.0	-13.0	-2.0	-100.0	0.0	-20.5	n/a	-20.5
North Dakota	-11.1	-12.5	0.0	-11.5	-12.2	0.0	-5.6	-100.0	0.0
Ohio	-0.7	-13.0	0.0	-0.5	-4.2	0.0	-0.8	-42.9	0.0
Oklahoma	-9.7	-14.0	-0.6	-10.7	-12.8	1.7	-7.8	-19.3	-1.5
Oregon	-8.3	-13.0	-3.4	-7.2	-7.2	-7.2	-9.0	-22.9	-3.0
Pennsylvania	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rhode Island	-10.0	0.0	-10.3	0.0	0.0	0.0	-10.9	n/a	-10.9
South Carolina	3.2	0.0	3.3	3.1	0.0	3.3	3.3	n/a	3.3
South Dakota	-6.5	-9.1	2.3	-5.7	-7.2	5.5	-10.8	-75.0	0.0
Tennessee	-1.5	0.0	-1.5	0.0	0.0	0.0	-2.2	0.0	-2.2
Texas	-1.8	-4.6	0.3	-2.1	-3.0	0.0	-1.5	-13.9	0.4
Utah	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n/a	0.0
Vermont	1.2	0.0	3.1	0.6	0.7	0.0	2.4	-9.1	4.2
Virginia	-1.5	-33.4	0.0	-2.9	-50.0	0.0	0.0	0.0	0.0
Washington	-0.4	-0.9	0.0	-0.6	-1.0	0.0	0.0	0.0	0.0
West Virginia	0.0	n/a	0.0	0.0	n/a	0.0	0.0	n/a	0.0
Wisconsin	-1.0	-5.2	0.6	-1.3	-4.1	0.7	-0.5	-11.2	0.5
Wyoming	-2.0	-6.7	0.0	-3.9	-7.7	0.0	0.0	0.0	0.0

Table A2.5. Number of rural, small, and other school district consolidations, by region and year

	Total			Rural			Nonrural		
	Total	Small	Large	Total	Small	Large	Total	Small	Large
United States									
1986-87	117	91	26	46	40	6	71	51	20
1987-88	93	73	20	43	40	3	50	33	17
1988-89	105	83	22	62	56	6	43	27	16
1989-90	109	88	21	66	57	9	43	31	12
1990-91	109	87	22	65	58	7	44	29	15
1991-92	189	152	37	138	118	20	51	34	17
1992-93	216	160	56	137	119	18	79	41	38
Northeast									
1986-87	13	8	5	5	4	1	8	4	4
1987-88	11	4	7	2	2	0	9	2	7
1988-89	5	4	1	3	2	1	2	2	0
1989-90	3	3	0	1	1	0	2	2	0
1990-91	10	6	4	3	3	0	7	3	4
1991-92	12	6	6	6	5	1	6	1	5
1992-93	13	8	5	6	5	1	7	3	4
Southeast									
1986-87	8	2	6	2	2	0	6	0	6
1987-88	2	1	1	0	0	0	2	1	1
1988-89	6	1	5	1	1	0	5	0	5
1989-90	4	1	3	0	0	0	4	1	3
1990-91	4	0	4	0	0	0	4	0	4
1991-92	6	0	6	2	0	2	4	0	4
1992-93	16	5	11	2	1	1	14	4	10
South Central									
1986-87	11	11	0	5	5	0	6	6	0
1987-88	4	4	0	2	2	0	2	2	0
1988-89	10	10	0	8	8	0	2	2	0
1989-90	20	20	0	12	12	0	8	8	0
1990-91	28	26	2	18	18	0	10	8	2
1991-92	15	15	0	12	12	0	3	3	0
1992-93	22	21	1	16	16	0	6	5	1
Midwest									
1986-87	63	57	6	23	19	4	40	38	2
1987-88	59	55	4	33	31	2	26	24	2
1988-89	60	56	4	37	36	1	23	20	3
1989-90	63	51	12	36	31	5	27	20	7
1990-91	49	44	5	35	32	3	14	12	2
1991-92	123	109	14	93	81	12	30	28	2
1992-93	118	97	21	90	79	11	28	18	10
West									
1986-87	22	13	9	11	10	1	11	3	8
1987-88	17	9	8	6	5	1	11	4	7
1988-89	24	12	12	13	9	4	11	3	8
1989-90	19	13	6	17	13	4	2	0	2
1990-91	18	11	7	9	5	4	9	6	3
1991-92	33	22	11	25	20	5	8	2	6
1992-93	47	29	18	23	18	5	24	11	13

Table A2.6. Number of rural, small, and other school district consolidations between 1986 and 1993, by state

	Total			Rural			Nonrural		
	Total	Small	Large	Total	Small	Large	Total	Small	Large
50 States and D.C.	938	734	204	557	488	69	381	246	135
Alabama	4	1	3	2	0	2	2	1	1
Alaska	2	2	0	2	2	0	0	0	0
Arizona	14	13	1	7	7	0	7	6	1
Arkansas	19	18	1	9	9	0	10	9	1
California	60	13	47	17	6	11	43	7	36
Colorado	3	3	0	3	3	0	0	0	0
Connecticut	0	0	0	0	0	0	0	0	0
Delaware	0	0	0	0	0	0	0	0	0
District o f Columbia	0	0	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0	0	0
Georgia	5	0	5	0	0	0	5	0	5
Hawaii	0	0	0	0	0	0	0	0	0
Idaho	5	4	1	5	4	1	0	0	0
Illinois	96	76	20	57	50	7	39	26	13
Indiana	12	7	5	0	0	0	12	7	5
Iowa	51	42	9	48	40	8	3	2	1
Kansas	0	0	0	0	0	0	0	0	0
Kentucky	2	0	2	0	0	0	2	0	2
Louisiana	0	0	0	0	0	0	0	0	0
Maine	10	8	2	8	7	1	2	1	1
Maryland	0	0	0	0	0	0	0	0	0
Massachusetts	19	9	10	6	4	2	13	5	8
Michigan	8	8	0	4	4	0	4	4	0
Minnesota	78	50	28	65	45	20	13	5	8
Mississippi	5	1	4	1	0	1	4	1	3
Missouri	7	7	0	5	5	0	2	2	0
Montana	65	53	12	59	50	9	6	3	3
Nebraska	215	213	2	109	108	1	106	105	1
Nevada	0	0	0	0	0	0	0	0	0
New Hampshire	1	1	0	0	0	0	1	1	0
New Jersey	4	2	2	0	0	0	4	2	2
New Mexico	0	0	0	0	0	0	0	0	0
New York	20	13	7	9	9	0	11	4	7
North Carolina	19	1	18	1	1	0	18	0	18
North Dakota	36	35	1	35	34	1	1	1	0
Ohio	4	4	0	1	1	0	3	3	0
Oklahoma	70	68	2	52	52	0	18	16	2
Oregon	28	20	8	9	7	2	19	13	6
Pennsylvania	1	1	0	0	0	0	1	1	0
Rhode Island	5	0	5	0	0	0	5	0	5
South Carolina	2	0	2	0	0	0	2	0	2
South Dakota	22	21	1	19	18	1	3	3	0
Tennessee	2	0	2	0	0	0	2	0	2
Texas	21	21	0	12	12	0	9	9	0
Utah	0	0	0	0	0	0	0	0	0
Vermont	7	5	2	3	2	1	4	3	1
Virginia	7	7	0	3	3	0	4	4	0
Washington	2	1	1	1	1	0	1	0	1
West Virginia	0	0	0	0	0	0	0	0	0
Wisconsin	6	6	0	4	4	0	2	2	0
Wyoming	0	0	0	0	0	0	0	0	0

Table A3.1. Number of schools in rural, small, and other school districts, by level and year

	All Districts				Rural Districts				Nonrural Districts			
	Tot	Elem	Unified	Sec	Tot	Elem	Unified	Sec	Tot	Elem	Unified	Sec
All Districts												
1986-87	82,397	7,111	74,015	1,271	20,044	2,175	17,586	283	62,353	4,936	56,429	988
1987-88	82,217	7,048	73,955	1,214	19,908	2,154	17,471	283	62,309	4,894	56,484	931
1988-89	82,164	7,008	73,928	1,228	19,795	2,136	17,370	289	62,369	4,872	56,558	939
1989-90	82,398	6,985	74,180	1,233	19,743	2,097	17,353	293	62,655	4,888	56,827	940
1990-91	83,408	7,327	74,780	1,301	19,935	2,248	17,393	294	63,473	5,079	57,387	1,007
1991-92	83,419	7,252	74,855	1,312	19,730	2,170	17,261	299	63,689	5,082	57,594	1,013
1992-93	83,463	7,019	75,113	1,331	19,615	2,081	17,210	324	63,848	4,938	57,903	1,007
1993-94	84,320	6,927	76,010	1,383	19,609	2,004	17,248	357	64,711	4,923	58,762	1,026
Small Districts												
1986-87	9,836	2,299	7,236	301	8,424	1,596	6,602	226	1,412	703	634	75
1987-88	9,573	2,242	7,046	285	8,290	1,578	6,489	223	1,283	664	557	62
1988-89	9,478	2,221	6,971	286	8,205	1,553	6,427	225	1,273	668	544	61
1989-90	9,385	2,173	6,926	286	8,153	1,518	6,410	225	1,232	655	516	61
1990-91	9,496	2,262	6,945	289	8,268	1,615	6,427	226	1,228	647	518	63
1991-92	9,317	2,175	6,848	294	8,110	1,550	6,331	229	1,207	625	517	65
1992-93	9,195	2,090	6,783	322	8,012	1,494	6,263	255	1,183	596	520	67
1993-94	9,074	2,000	6,718	356	7,917	1,435	6,195	287	1,157	565	523	69
Large Districts												
1986-87	72,561	4,812	66,779	970	11,620	579	10,984	57	60,941	4,233	55,795	913
1987-88	72,644	4,806	66,909	929	11,618	576	10,982	60	61,026	4,230	55,927	869
1988-89	72,686	4,787	66,957	942	11,590	583	10,943	64	61,096	4,204	56,014	878
1989-90	73,013	4,812	67,254	947	11,590	579	10,943	68	61,423	4,233	56,311	879
1990-91	73,912	5,065	67,835	1,012	11,667	633	10,966	68	62,245	4,432	56,869	944
1991-92	74,102	5,077	68,007	1,018	11,620	620	10,930	70	62,482	4,457	57,077	948
1992-93	74,268	4,929	68,330	1,009	11,603	587	10,947	69	62,665	4,342	57,383	940
1993-94	75,246	4,927	69,292	1,027	11,692	569	11,053	70	63,554	4,358	58,239	957

Table A3.2. Number of small schools in rural, small, and other school districts, by level and year

	All Districts				Rural Districts				Nonrural Districts			
	Tot	Elem	Unified	Sec	Tot	Elem	Unified	Sec	Tot	Elem	Unified	Sec
All Districts												
1986-87	15,651	2,478	12,732	441	9,844	1,665	7,942	237	5,807	813	4,790	204
1987-88	15,233	2,350	12,479	404	9,605	1,598	7,773	234	5,628	752	4,706	170
1988-89	15,132	2,281	12,429	422	9,468	1,569	7,661	238	5,664	712	4,768	184
1989-90	15,146	2,213	12,503	430	9,463	1,532	7,688	243	5,683	681	4,815	187
1990-91	15,353	2,263	12,639	451	9,511	1,600	7,662	249	5,842	663	4,977	202
1991-92	15,186	2,183	12,535	468	9,313	1,554	7,511	248	5,873	629	5,024	220
1992-93	14,943	2,074	12,380	489	9,059	1,489	7,312	258	5,884	585	5,068	231
1993-94	14,959	1,968	12,488	503	8,903	1,423	7,199	281	6,056	545	5,289	222
Small Districts												
1986-87	7,866	2,252	5,336	278	6,690	1,570	4,896	224	1,176	682	440	54
1987-88	7,659	2,206	5,186	267	6,567	1,550	4,797	220	1,092	656	389	47
1988-89	7,479	2,132	5,084	263	6,449	1,513	4,715	221	1,030	619	369	42
1989-90	7,375	2,054	5,057	264	6,388	1,468	4,700	220	987	586	357	44
1990-91	7,375	2,081	5,028	266	6,425	1,517	4,687	221	950	564	341	45
1991-92	7,174	2,006	4,904	264	6,270	1,478	4,573	219	904	528	331	45
1992-93	7,019	1,917	4,823	279	6,140	1,418	4,490	232	879	499	333	47
1993-94	6,873	1,814	4,758	301	6,030	1,354	4,420	256	843	460	338	45
Large Districts												
1986-87	7,785	226	7,396	163	3,154	95	3,046	13	4,631	131	4,350	150
1987-88	7,574	144	7,293	137	3,038	48	2,976	14	4,535	96	4,317	123
1988-89	7,653	149	7,345	159	3,019	56	2,946	17	4,634	93	4,399	142
1989-90	7,771	159	7,446	166	3,075	64	2,988	23	4,696	95	4,458	143
1990-91	7,978	182	7,611	185	3,086	83	2,975	28	4,892	99	4,636	157
1991-92	8,012	177	[illegible]	204	3,043	76	2,938	29	4,969	101	4,693	175
1992-93	7,924	[illegible]	7,557	210	2,919	71	2,822	26	5,005	86	4,735	184
1993-94	8,086	[illegible]	7,7[illegible]	202	2,873	69	2,779	25	5,213	85	4,951	177

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Table A3.3. Number of small rural schools in rural, small, and other school districts, by level and year

	All Districts				Rural Districts				Nonrural Districts			
	Tot	Elem	Unified	Sec	Tot	Elem	Unified	Sec	Tot	Elem	Unified	Sec
All Districts												
1986-87	9,880	1,706	7,929	245	8,914	1,637	7,043	234	966	69	886	11
1987-88	9,611	1,631	7,738	242	8,673	1,570	6,872	231	938	61	866	11
1988-89	9,479	1,599	7,633	247	8,554	1,544	6,775	235	925	55	858	12
1989-90	9,506	1,566	7,688	252	8,567	1,513	6,813	241	939	53	875	11
1990-91	9,555	1,635	7,657	263	8,614	1,587	6,779	248	941	48	878	15
1991-92	9,959	1,559	8,138	262	9,076	1,547	7,284	245	883	12	854	17
1992-93	9,708	1,493	7,943	272	8,832	1,481	7,096	255	876	12	847	17
1993-94	9,501	1,424	7,784	293	8,631	1,413	6,940	278	870	11	844	15
Small Districts												
1986-87	6,381	1,596	4,560	225	6,256	1,543	4,492	221	125	53	68	4
1987-88	6,248	1,576	4,451	221	6,126	1,524	4,385	217	122	52	66	4
1988-89	6,131	1,537	4,374	220	6,024	1,490	4,316	218	107	47	58	2
1989-90	6,063	1,493	4,350	220	5,973	1,450	4,305	218	90	43	45	2
1990-91	6,081	1,541	4,319	221	6,019	1,506	4,293	220	62	35	26	1
1991-92	6,252	1,474	4,561	217	6,233	1,472	4,545	216	19	2	16	1
1992-93	6,118	1,412	4,476	230	6,097	1,410	4,458	229	21	2	18	1
1993-94	5,965	1,346	4,365	254	5,946	1,344	4,349	253	19	2	16	1
Large Districts												
1986-87	3,499	110	3,369	20	2,658	94	2,551	13	841	16	818	7
1987-88	3,363	55	3,287	21	2,547	46	2,487	14	816	9	800	7
1988-89	3,348	62	3,259	27	2,530	54	2,459	17	818	8	800	10
1989-90	3,443	73	3,338	32	2,594	63	2,508	23	849	10	830	9
1990-91	3,474	94	3,338	42	2,595	81	2,486	28	879	13	852	14
1991-92	3,707	85	3,577	45	2,843	75	2,739	29	864	10	838	16
1992-93	3,590	81	3,467	42	2,735	71	2,638	26	855	10	829	16
1993-94	3,536	78	3,419	39	2,685	69	2,591	25	851	9	828	14

Table A3.4. Number of regular and non-regular schools in rural, small, and other school districts, by year

	Schools in All Districts		Schools in Rural Districts		Schools in Nonrural Districts	
	Regular	Nonregular	Regular	Nonregular	Regular	Nonregular
All Districts						
1986-87	79,043	3,052	19,664	321	59,379	2,731
1987-88	78,610	2,999	19,414	309	59,196	2,690
1988-89	78,753	2,789	19,314	281	59,439	2,508
1989-90	78,968	3,192	19,401	297	59,567	2,895
1990-91	79,983	3,213	19,558	341	60,425	2,872
1991-92	79,647	3,791	19,352	386	60,295	3,405
1992-93	79,362	4,101	19,128	487	60,234	3,614
1993-94	79,757	4,565	19,146	465	60,611	4,100
Small Districts						
1986-87	9,606	180	8,307	77	1,299	103
1987-88	9,386	125	8,166	66	1,220	59
1988-89	9,315	101	8,104	55	1,211	46
1989-90	9,261	110	8,088	56	1,173	54
1990-91	9,329	165	8,165	103	1,164	62
1991-92	9,124	200	8,022	94	1,102	106
1992-93	8,933	262	7,858	154	1,075	108
1993-94	8,850	224	7,807	110	1,043	114
Large Districts						
1986-87	69,437	2,872	11,357	244	58,080	2,628
1987-88	69,224	2,874	11,248	243	57,976	2,631
1988-89	69,438	2,688	11,210	226	58,228	2,462
1989-90	69,707	3,082	11,313	241	58,394	2,841
1990-91	70,654	3,048	11,393	238	59,261	2,810
1991-92	70,523	3,591	11,330	292	59,193	3,299
1992-93	70,429	3,839	11,270	333	59,159	3,506
1993-94	70,907	4,341	11,339	355	59,568	3,986

Table A3.5. Number of combined (K-12), elementary, intermediate, secondary, and ungraded/other schools in rural, small, and other school districts in 1986-87 and 1993-94

	All Districts			Rural Districts			Nonrural Districts		
	Total	Small	Large	Total	Small	Large	Total	Small	Large
Elementary Schools									
1986-87	50,591	5,563	45,028	11,225	4,621	6,604	39,366	942	38,424
1993-94	51,513	4,823	46,690	10,503	4,077	6,426	41,010	746	40,264
Intermediate Schools									
1986-87	11,938	525	11,413	2,064	480	1,584	9,874	45	9,829
1993-94	12,954	821	12,133	2,560	763	1,797	10,394	58	10,336
High Schools									
1986-87	15,714	3,180	12,534	5,664	2,883	2,781	10,050	297	9,753
1993-94	15,826	2,750	13,076	5,315	2,521	2,794	10,511	229	10,282
Combined Schools									
1986-87	1,775	409	1,366	805	355	450	970	54	916
1993-94	2,461	586	1,875	1,002	507	495	1,459	79	1,380
Ungraded Schools									
1986-87	966	63	903	55	11	44	911	52	859
1993-94	608	45	563	33	11	22	575	34	541

Table A3.6. Number of schools with kindergarten and ungraded classes in rural, small, and other school districts, by year

	Schools in All Districts			Schools in Rural Districts			Schools in Nonrural Districts		
	Kinder-garten	Prekin-dergarten	Ungraded	Kinder-garten	Prekin-dergarten	Ungraded	Kinder-garten	Prekin-dergarten	Ungraded
All Districts									
1986-87	44,791	5,539	25,435	10,282	953	4,238	34,509	4,586	21,197
1987-88	46,364	6,467	23,434	10,463	1,197	3,812	35,901	5,270	19,622
1988-89	46,525	6,885	25,140	10,453	1,248	4,123	36,072	5,637	21,017
1989-90	46,803	8,178	25,919	10,497	1,490	4,018	36,306	6,688	21,901
1990-91	46,963	9,416	23,908	10,465	1,828	3,569	36,498	7,588	20,339
1991-92	46,940	11,591	24,000	10,330	2,417	3,670	36,610	9,174	20,330
1992-93	47,092	12,358	23,908	10,237	2,502	3,679	36,855	9,856	20,229
1993-94	47,126	13,316	22,713	10,162	2,731	3,266	36,964	10,585	19,447
Small Districts									
1986-87	5,116	495	1,283	4,278	450	1,087	838	45	196
1987-88	5,199	637	1,240	4,362	562	1,078	837	75	162
1988-89	5,214	626	1,273	4,373	568	1,085	841	58	188
1989-90	5,207	719	1,081	4,378	655	923	829	64	158
1990-91	5,159	893	1,004	4,349	812	845	810	81	159
1991-92	5,070	1,001	1,008	4,286	902	852	784	99	156
1992-93	4,982	1,084	1,000	4,213	984	838	769	100	162
1993-94	4,895	1,181	851	4,162	1,066	685	733	115	166
Large Districts									
1986-87	39,675	5,044	24,152	6,004	503	3,151	33,671	4,541	21,001
1987-88	41,165	5,830	22,194	6,101	635	2,734	35,064	5,195	19,460
1988-89	41,311	6,259	23,867	6,080	680	3,038	35,231	5,579	20,829
1989-90	41,596	7,459	24,838	6,119	835	3,095	35,477	6,624	21,743
1990-91	41,804	8,523	22,904	6,116	1,016	2,724	35,688	7,507	20,180
1991-92	41,870	10,590	22,992	6,044	1,515	2,818	35,826	9,075	20,174
1992-93	42,110	11,274	22,908	6,024	1,518	2,841	36,086	9,756	20,067
1993-94	42,231	12,135	21,862	6,000	1,665	2,581	36,231	10,470	19,281

Table A3.7. Number of small schools with fewer than one teacher per grade, by level

	All Districts				Rural Districts				Nonrural Districts			
	Tot	Elem	Unified	Sec	Tot	Elem	Unified	Sec	Tot	Elem	Unified	Sec
All Districts												
1986-87	4,356	1,705	2,580	71	2,691	1,190	1,487	14	1,665	515	1,093	57
1987-88	4,093	1,656	2,390	47	2,573	1,176	1,382	15	1,520	480	1,008	32
1988-89	4,415	1,640	2,701	74	2,725	1,173	1,531	21	1,690	467	1,170	53
1989-90	4,201	1,563	2,574	64	2,598	1,120	1,459	19	1,603	443	1,115	45
1990-91	4,225	1,545	2,603	77	2,595	1,118	1,455	22	1,630	427	1,148	55
1991-92	4,229	1,490	2,643	96	2,482	1,071	1,380	31	1,747	419	1,263	65
1992-93	4,032	1,368	2,566	98	2,274	991	1,252	31	1,758	377	1,314	67
1993-94	4,152	1,294	2,736	122	2,263	945	1,267	51	1,889	349	1,469	71
Small Districts												
1986-87	2,599	1,646	934	19	2,016	1,164	845	7	583	482	89	12
1987-88	2,491	1,604	874	13	1,970	1,155	808	7	521	449	66	6
1988-89	2,588	1,583	986	19	2,076	1,146	917	13	512	437	69	6
1989-90	2,428	1,501	911	16	1,949	1,089	851	9	479	412	60	7
1990-91	2,418	1,483	916	19	1,961	1,090	861	10	457	393	55	9
1991-92	2,340	1,428	885	27	1,885	1,046	822	17	455	382	63	10
1992-93	2,110	1,306	776	28	1,705	966	722	17	405	340	54	11
1993-94	2,056	1,227	784	45	1,677	919	722	36	379	308	62	9
Large Districts												
1986-87	1,757	59	1,646	52	675	26	642	7	1,082	33	1,004	45
1987-88	1,602	52	1,516	34	603	21	574	8	999	31	942	26
1988-89	1,827	57	1,715	55	649	27	614	8	1,178	30	1,101	47
1989-90	1,773	62	1,663	48	649	31	608	10	1,124	31	1,055	38
1990-91	1,807	62	1,687	58	634	28	594	12	1,173	34	1,093	46
1991-92	1,889	62	1,758	69	597	25	558	14	1,292	37	1,200	55
1992-93	1,922	62	1,790	70	569	25	530	14	1,353	37	1,260	56
1993-94	2,096	67	1,952	77	586	26	545	15	1,510	41	1,407	62

Table A3.8. Patterns of school levels in small rural districts, by year

E	M	H	C	U	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94
1		1			1,997	1,877	1,824	1,758	1,670	1,646	1,584	1,520
1					1,435	1,421	1,417	1,403	1,275	1,280	1,229	1,185
1	1	1			359	368	376	399	437	416	433	462
			1		176	269	289	304	305	299	301	299
		1			207	208	206	210	205	202	190	164
1	1				15	14	31	47	161	160	155	128
2		1			136	130	126	131	121	118	109	105
2	1	1			62	63	60	59	62	70	78	83
1			1		65	52	53	52	56	71	77	76
3	1	1			14	18	18	18	18	16	19	24
	1				7	9	9	14	14	18	17	19
1		2			4	5	2	5	10	11	13	19
2					31	34	29	28	32	23	23	19
2		2			10	11	11	13	12	13	17	17
				1	44	54	43	16	15	16	10	13
2	1				2	3	3	2	6	7	9	9
		2			4	3	4	4	6	5	5	7
1		1	1		4	4	7	3	4	9	8	7
2			1		1	1	2	2	6	6	7	5
				1	4	3	1	2	2	5	2	4
			2		1	2	3	1	1	2	1	4
1	1	2			2	2	3	2	4	3	3	4
4	1	1			2	2	2	3	3	2	3	4
		1	1		0	3	3	3	5	3	5	3
	1	1			1	1	3	3	3	4	2	3
1	1		1		0	0	1	0	0	1	2	3
2	2	1			0	0	0	0	1	2	1	3
3					3	3	4	3	3	4	4	3
3		1			19	15	15	10	10	10	7	3
1		1		1	0	2	3	3	2	0	2	2
1	1	1		1	3	3	3	3	2	3	2	2
3		2			2	2	2	1	1	2	3	2
4		1			6	5	4	4	4	4	3	2
3	1				0	0	0	1	3	0	0	1
1				1	1	1	2	1	10	0	1	0
2			9		1	1	2	3	0	0	1	0
6	1	1			2	2	3	3	3	0	0	0
Other					33	35	29	32	33	26	25	34

Note: "E", "M", "H", "C", and "U" refers to the grade span of school. They stand for elementary, intermediate, high, combined, and undefined or ungraded, respectively.

Table A3.9. Counts of year-to-year school level changes in small rural districts

Year 1 to Year 2																			
E	M	H	C	U	TO	E	M	H	C	U	86-87	87-88	88-89	89-90	90-91	91-92	92-93	Total
1					→	0					21	19	28	34	29	46	43	220
1		1			→	1	1	1			22	20	41	46	13	24	19	185
1		1			→				1		86	18	25	9	5	6	3	152
1					→	1	1				1	2	2	96	1	2	1	105
1		1			→	0		0			8	6	9	9	14	28	29	103
1		1			→	1			1		12	11	9	16	23	17	15	103
1	1	1			→	1		1			6	10	9	9	36	13	9	92
1		1			→	1					10	8	11	18	13	7	7	74
1		1			→	1	1				2	8	14	16	5	10	4	59
1			1		→	1		1			7	4	7	10	7	9	10	54
1					→		1				6	6	8	8	6	7	8	49
1	1				→	0	0				0	0	3	0	1	14	30	48
			1		→	1		1			4	3	17	3	8	5	1	41
2		1			→	1		1			6	5	5	7	6	5	2	36
				1	→	1					5	8	9	2	4	0	2	30
1			1		→				1		17	4	1	1	1	3	1	28
		1			→	1	1	1			0	0	0	0	0	10	17	27
2	1	1			→	1	1	1			1	2	2	4	9	3	6	27
2					→	1					1	2	4	3	11	1	4	26
	1				→	1					4	4	3	6	3	2	1	23
1	1	1			→	0	0	0			1	2	4	3	3	7	3	23
1					→	2					2	3	0	10	2	4	1	22
1					→				1		2	2	4	3	3	6	1	21
2		1			→	1	1	1			3	3	0	3	2	6	4	21
			1		→	1					0	3	2	5	5	3	2	20
				1	→					0	1	3	2	0	4	5	4	19
			1		→				0		6	0	3	2	4	1	2	18
1					→	0					6	0	0	3	3	.	6	18
1			1		→	1	1	1			3	4	0	4	1	3	2	17
1		1			→	2		1			3	1	0	3	5	4	1	17
		1			→			0			2	1	1	6	2	2	2	16
	1				→		0				0	3	1	2	1	5	4	16
1		1			→	1		2			2	0	0	5	1	4	3	15
1	1	1			→	2	1	1			0	1	1	1	2	5	5	15
1	1	1			→	2		1			3	0	3	2	2	2	2	14
				0	→					1	5	1	0	0	3	4	0	13
1	1	1			→				1		10	0	1	1	0	1	0	13
2		1			→	2	1	1			3	0	0	4	3	2	1	13
				1	→	1		1			1	0	7	0	0	0	4	12
			1		→			1			3	1	2	2	1	2	1	12
1	1				→	1					2	2	0	2	3	1	2	12
1	1	1			→	1	1				0	4	2	3	1	1	1	12
0	0				→	1		1			1	1	2	3	2	2	0	11
0	0	0			→	2	1	1			0	1	3	4	1	0	2	11
		1			→				1		0	3	1	1	0	2	4	11
1		1			→			1			1	5	3	0	0	0	2	11
1					→	1		1			2	0	1	2	0	2	3	10
1				1	→	1					0	0	0	0	10	0	0	10

Note: Only pattern changes with 10 or more occurrences are included in this table. "E", "M", "H", "C", and "U" refers to the grade span of school. They stand for elementary, intermediate, high, combined, and undefined or ungraded, respectively.

Table A3.10. Counts of year-to-year school level changes in small rural districts with increasing or declining enrollment

Year 1 to Year 2												86-87	87-88	88-89	89-90	90-91	91-92	
E	M	H	C	U	TO	E	M	H	C	U		to 87-88	to 88-89	to 89-90	to 90-91	to 91-92	to 92-93	Total
Decreased Enrollment																		
1					→	0						41	47	62	62	73	88	373
1		1			→	0		0				14	16	19	26	44	57	176
1		1			→	1	1	1				13	22	32	12	3	8	90
1		1			→	1						14	6	20	23	15	9	87
1	1				→	0	0					0	0	3	1	16	42	62
1		1			→				1			33	8	5	5	4	3	58
1	1	1			→	1		1				11	9	4	11	14	3	52
1	1	1			→	0	0	0				3	7	7	6	12	9	44
1					→	1	1					0	0	20	17	2	0	39
1		1			→	1	1					2	7	11	8	6	2	36
1		1			→	1			1			4	3	6	7	7	4	31
		1			→			0				3	2	7	8	4	4	28
			1		→				0			7	2	5	4	6	3	27
	1				→		0					2	4	2	3	6	9	26
				1	→					0		2	6	2	1	4	9	24
1			1		→	1		1				2	4	10	2	1	3	22
1		1			→			1				5	8	3	0	1	2	19
2		1			→	1		1				5	4	1	1	5	2	18
			1		→	1		1				0	7	5	2	1	2	17
2		1			→	0		0				2	4	2	1	3	4	16
2					→	0						1	4	1	0	3	4	13
1			1		→				1			9	0	1	0	0	2	12
			1		→	1						1	1	3	2	3	1	11
2	1	1			→	1	1	1				1	1	3	3	1	2	11
Increased Enrollment																		
1		1			→	1	1	1				18	15	26	17	25	26	127
1		1			→				1			35	14	9	4	5	2	69
1		1			→	1			1			7	3	8	13	18	12	61
1		1			→	1	1					7	12	15	11	6	8	59
1					→	1	1					2	2	21	27	0	0	52
1	1	1			→	1		1				2	4	5	10	15	13	49
		1			→	1	1	1				0	0	0	0	10	28	38
			1		→	1		1				2	4	7	6	11	5	35
0		0			→	1		1				3	3	5	6	4	6	27
1			1		→	1		1				1	2	3	5	9	4	24
1		1			→	1						3	7	5	4	3	2	24
1	1	1			→	2	1	1				1	2	2	3	6	6	20
2		1			→	1		1				2	4	6	0	6	2	20
0	0	0			→	2	1	1				1	4	7	3	2	2	19
1		1			→	2		1				1	1	2	7	5	3	19
2		1			→	1	1	1				1	2	1	2	3	6	15
1					→	2						4	2	4	1	1	2	14
1		1			→	2	1	1				0	1	1	2	4	6	14
2	1	1			→	1	1	1				0	1	2	4	4	3	14
				1	→	1						1	4	5	2	1	0	13
				0	→					1		2	1	0	3	6	0	12
		0			→			1				0	1	3	4	3	1	12
1					→				1			0	1	3	2	3	2	11
1	1	1			→	2		1				1	1	3	1	4	1	11
0					→	1						6	0	0	0	1	3	10
0	0	0			→	1	1	1				0	1	3	5	0	1	10

Note: Only pattern changes with 10 or more occurrences are included in this table. "E", "M", "H", "C", and "U" refers to the grade span of school. They stand for elementary, intermediate, high, combined, and undefined or ungraded, respectively.

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TableA 4.1a. Number of minority and white students in rural, small, and other school districts, by year

	Total			Rural			Nonrural		
	Total	Minority	White	Total	Minority	White	Total	Minority	White
Total									
1987-88	39,749,428	12,119,382	27,630,046	5,397,036	822,860	4,574,176	34,352,392	11,296,522	23,055,870
1988-89	39,941,106	12,350,689	27,590,417	5,409,189	838,609	4,570,580	34,531,917	11,512,080	23,019,837
1989-90	40,310,954	12,656,093	27,654,861	5,422,985	827,202	4,595,783	34,887,969	11,828,891	23,059,078
1990-91	40,970,006	13,116,179	27,853,827	5,452,961	831,148	4,621,813	35,517,045	12,285,031	23,232,014
1991-92	41,812,543	13,600,023	28,212,520	5,534,517	852,957	4,681,560	36,278,026	12,747,066	23,530,960
1992-93	42,572,064	13,817,862	28,754,202	5,628,550	876,480	4,752,070	36,943,514	12,941,382	24,002,132
1993-94	43,197,078	14,642,689	28,554,389	5,710,536	916,301	4,794,235	37,486,542	13,726,388	23,760,154
Small									
1987-88	1,274,970	153,561	1,121,409	1,112,648	128,054	984,594	162,322	25,507	136,815
1988-89	1,292,108	163,218	1,128,890	1,109,220	130,370	978,850	182,888	32,848	150,040
1989-90	1,293,286	160,360	1,132,926	1,108,818	124,400	984,418	184,468	35,960	148,508
1990-91	1,293,245	158,388	1,134,857	1,107,152	121,749	985,403	186,093	36,639	149,454
1991-92	1,308,893	163,715	1,145,178	1,119,153	125,675	993,478	189,740	38,040	151,700
1992-93	1,325,246	167,201	1,158,045	1,130,763	128,429	1,002,334	194,483	38,772	155,711
1993-94	1,327,372	177,122	1,150,250	1,131,346	135,070	996,276	196,026	42,052	153,974
Large									
1987-88	38,474,458	11,965,821	26,508,637	4,284,388	694,806	3,589,582	34,190,070	11,271,015	22,919,055
1988-89	38,648,998	12,187,471	26,461,527	4,299,969	708,239	3,591,730	34,349,029	11,479,232	22,869,797
1989-90	39,017,668	12,495,733	26,521,935	4,314,167	702,802	3,611,365	34,703,501	11,792,931	22,910,570
1990-91	39,676,761	12,957,791	26,718,970	4,345,809	709,399	3,636,410	35,330,952	12,248,392	23,082,560
1991-92	40,503,650	13,436,308	27,067,342	4,415,364	727,282	3,688,082	36,088,286	12,709,026	23,379,260
1992-93	41,246,818	13,650,661	27,596,157	4,497,787	748,051	3,749,736	36,749,031	12,902,610	23,846,421
1993-94	41,869,706	14,465,567	27,404,139	4,579,190	781,231	3,797,959	37,290,516	13,684,336	23,606,180

Table A4.1b. Percentage of minority and white students in rural, small, and other school districts, by year

	Total		Rural		Nonrural	
	Minority	White	Minority	White	Minority	White
Total						
1987-88	30.5	69.5	15.2	84.8	32.9	67.1
1988-89	30.9	69.1	15.5	84.5	33.3	66.7
1989-90	31.4	68.6	15.3	84.7	33.9	66.1
1990-91	32.0	68.0	15.2	84.8	34.6	65.4
1991-92	32.5	67.5	15.4	84.6	35.1	64.9
1992-93	32.5	67.5	15.6	84.4	35.0	65.0
1993-94	33.9	66.1	16.0	84.0	36.6	63.4
Small						
1987-88	12.0	88.0	11.5	88.5	15.7	84.3
1988-89	12.6	87.4	11.8	88.2	18.0	82.0
1989-90	12.4	87.6	11.2	88.8	19.5	80.5
1990-91	12.2	87.8	11.0	89.0	19.7	80.3
1991-92	12.5	87.5	11.2	88.8	20.0	80.0
1992-93	12.6	87.4	11.4	88.6	19.9	80.1
1993-94	13.3	86.7	11.9	88.1	21.5	78.5
Large						
1987-88	31.1	68.9	16.2	83.8	33.0	67.0
1988-89	31.5	68.5	16.5	83.5	33.4	66.6
1989-90	32.0	68.0	16.3	83.7	34.0	66.0
1990-91	32.7	67.3	16.3	83.7	34.7	65.3
1991-92	33.2	66.8	16.5	83.5	35.2	64.8
1992-93	33.1	66.9	16.6	83.4	35.1	64.9
1993-94	34.5	65.5	17.1	82.9	36.7	63.3

Table A4.1c. Number of black, Hispanic, Asian, and Native American students (in thousands) in rural, small, and other school districts, by year

	Total				Rural				Nonrural			
	Black	Hisp.	Asian	Native Amer.	Black	Hisp.	Asian	Native Amer.	Black	Hisp.	Asian	Native Amer.
Total												
1987-88	6,527	4,012	1,204	377	481	191	26	125	6,046	3,821	1,178	252
1988-89	6,498	4,229	1,242	383	488	202	24	125	6,010	4,027	1,217	258
1989-90	6,525	4,445	1,295	391	473	205	24	125	6,052	4,240	1,272	266
1990-91	6,644	4,731	1,343	398	466	214	23	128	6,178	4,517	1,320	271
1991-92	6,769	4,990	1,417	424	467	227	24	135	6,303	4,763	1,392	289
1992-93	6,856	5,085	1,443	433	474	239	25	138	6,383	4,846	1,418	294
1993-94	7,169	5,470	1,547	457	490	255	27	144	6,679	5,215	1,519	313
Small												
1987-88	40	60	7	46	32	50	6	41	9	11	2	5
1988-89	41	68	7	47	33	51	5	42	9	17	2	5
1989-90	35	72	7	46	27	52	4	41	8	20	3	5
1990-91	31	73	6	47	23	52	4	42	8	21	2	5
1991-92	31	76	7	49	23	55	4	44	8	22	3	5
1992-93	31	78	7	51	23	56	4	45	8	22	3	6
1993-94	32	84	7	54	23	60	4	48	9	24	3	6
Large												
1987-88	6,487	3,952	1,197	331	449	142	20	84	6,037	3,810	1,177	247
1988-89	6,456	4,161	1,234	336	455	150	20	83	6,001	4,011	1,215	253
1989-90	6,490	4,373	1,289	345	446	153	19	84	6,043	4,220	1,269	261
1990-91	6,613	4,658	1,336	351	443	162	19	85	6,170	4,496	1,317	266
1991-92	6,738	4,914	1,410	374	443	173	20	91	6,295	4,741	1,390	283
1992-93	6,825	5,007	1,436	382	450	184	21	93	6,375	4,824	1,415	289
1993-94	7,137	5,386	1,539	403	467	195	23	96	6,670	5,191	1,517	307

Table A4.1d. Percentage of black, Hispanic, Asian, and Native American students in rural, small, and other school districts, by year

	Total				Rural				Nonrural			
	Black	Hisp.	Asian	Native Amer.	Black	Hisp.	Asian	Native Amer.	Black	Hisp.	Asian	Native Amer.
Total												
1987-88	16.4	10.1	3.0	0.9	8.9	3.5	0.5	2.3	17.6	11.1	3.4	0.7
1988-89	16.3	10.6	3.1	1.0	9.0	3.7	0.5	2.3	17.4	11.7	3.5	0.7
1989-90	16.2	11.0	3.2	1.0	8.7	3.8	0.4	2.3	17.3	12.2	3.6	0.8
1990-91	16.2	11.5	3.3	1.0	8.6	3.9	0.4	2.3	17.4	12.7	3.7	0.8
1991-92	16.2	11.9	3.4	1.0	8.4	4.1	0.4	2.4	17.4	13.1	3.8	0.8
1992-93	16.1	11.9	3.4	1.0	8.4	4.3	0.4	2.5	17.3	13.1	3.8	0.8
1993-94	16.6	12.7	3.6	1.1	8.6	4.5	0.5	2.5	17.8	13.9	4.1	0.8
Small												
1987-88	3.2	4.7	0.6	3.6	2.8	4.5	0.5	3.7	5.3	6.6	1.0	2.9
1988-89	3.2	5.3	0.6	3.6	2.9	4.6	0.4	3.8	4.8	9.1	1.4	2.7
1989-90	2.7	5.6	0.5	3.6	2.4	4.7	0.4	3.7	4.6	10.8	1.4	2.7
1990-91	2.4	5.7	0.5	3.7	2.1	4.7	0.3	3.8	4.3	11.3	1.3	2.8
1991-92	2.4	5.8	0.5	3.8	2.1	4.9	0.4	3.9	4.2	11.5	1.4	2.9
1992-93	2.4	5.9	0.5	3.8	2.1	4.9	0.4	4.0	4.2	11.4	1.4	3.0
1993-94	2.4	6.3	0.5	4.1	2.0	5.3	0.4	4.2	4.5	12.4	1.5	3.1
Large												
1987-88	16.9	10.3	3.1	0.9	10.5	3.3	0.5	2.0	17.7	11.1	3.4	0.7
1988-89	16.7	10.8	3.2	0.9	10.6	3.5	0.5	1.9	17.5	11.7	3.5	0.7
1989-90	16.6	11.2	3.3	0.9	10.3	3.6	0.5	1.9	17.4	12.2	3.7	0.8
1990-91	16.7	11.7	3.4	0.9	10.2	3.7	0.4	2.0	17.5	12.7	3.7	0.8
1991-92	16.6	12.1	3.5	0.9	10.0	3.9	0.5	2.1	17.4	13.1	3.9	0.8
1992-93	16.5	12.1	3.5	0.9	10.0	4.1	0.5	2.1	17.3	13.1	3.9	0.8
1993-94	17.0	12.9	3.7	1.0	10.2	4.3	0.5	2.1	17.9	13.9	4.1	0.8

Table A4.1e. Number of low, medium, or high minority rural, small, and other districts, by year

	Total			Rural			Nonrural		
	Low	Minority Medium	High	Low	Minority Medium	High	Low	Minority Medium	High
Total									
1987-88	9,879	4,039	1,355	5,408	1,467	512	4,471	2,572	843
1988-89	9,760	4,074	1,365	5,371	1,477	505	4,389	2,597	860
1989-90	9,732	3,980	1,401	5,394	1,391	520	4,338	2,589	881
1990-91	9,610	3,996	1,429	5,326	1,410	524	4,284	2,586	905
1991-92	9,387	4,126	1,443	5,212	1,467	528	4,175	2,659	915
1992-93	9,290	4,093	1,437	5,131	1,434	526	4,159	2,659	911
1993-94	8,984	4,119	1,545	4,984	1,445	550	4,000	2,674	995
Small									
1987-88	4,134	1,128	346	3,485	874	267	649	254	79
1988-89	4,090	1,111	342	3,469	863	261	621	248	81
1989-90	4,078	1,038	353	3,472	803	271	606	235	82
1990-91	3,996	1,052	354	3,415	816	274	581	236	80
1991-92	3,891	1,093	349	3,330	851	276	561	242	73
1992-93	3,798	1,062	344	3,255	823	273	543	239	71
1993-94	3,618	1,070	364	3,117	835	286	501	235	78
Large									
1987-88	5,745	2,911	1,009	1,923	593	245	3,822	2,318	764
1988-89	5,670	2,963	1,023	1,902	614	244	3,768	2,349	779
1989-90	5,654	2,942	1,048	1,922	588	249	3,732	2,354	799
1990-91	5,614	2,944	1,075	1,911	594	250	3,703	2,350	825
1991-92	5,496	3,033	1,094	1,882	616	252	3,614	2,417	842
1992-93	5,492	3,031	1,093	1,876	611	253	3,616	2,420	840
1993-94	5,366	3,049	1,181	1,867	610	264	3,499	2,439	917

Table A4.1f. Minority enrollment in low, medium, or high minority rural, small, and other school districts, by year

	Total			Rural			Nonrural		
	Low	Minority Medium	High	Low	Minority Medium	High	Low	Minority Medium	High
Total									
1987-88	4.8	33.6	61.6	12.8	42.9	44.3	4.2	32.9	62.8
1988-89	4.8	33.6	61.6	12.9	43.8	43.2	4.2	32.9	62.9
1989-90	4.5	33.7	61.7	12.6	43.2	44.2	4.0	33.1	62.9
1990-91	4.2	33.3	62.5	11.2	43.8	45.0	3.7	32.6	63.6
1991-92	4.0	33.6	62.4	10.5	45.0	44.5	3.6	32.9	63.6
1992-93	4.0	33.9	62.1	10.4	45.0	44.7	3.6	33.1	63.3
1993-94	3.6	32.6	63.7	10.3	43.3	46.4	3.2	31.9	64.9
Small									
1987-88	16.8	43.6	39.6	17.4	43.3	39.2	13.4	45.2	41.4
1988-89	16.6	43.6	39.9	17.9	44.6	37.5	11.0	39.7	49.3
1989-90	16.0	41.1	42.9	17.7	42.4	39.9	9.9	36.6	53.5
1990-91	12.6	42.2	45.3	13.9	44.0	42.1	8.2	36.1	55.7
1991-92	12.1	43.7	44.2	13.4	45.3	41.2	7.7	38.4	53.9
1992-93	12.0	44.1	43.9	13.3	45.7	41.0	7.8	38.6	53.6
1993-94	12.2	43.3	44.6	13.6	45.0	41.4	7.5	37.9	54.6
Large									
1987-88	4.7	33.5	61.9	12.0	42.8	45.2	4.2	32.9	62.9
1988-89	4.6	33.5	61.9	12.0	43.7	44.3	4.2	32.9	63.0
1989-90	4.4	33.6	62.0	11.6	43.4	45.0	4.0	33.1	63.0
1990-91	4.1	33.2	62.7	10.7	43.8	45.5	3.7	32.6	63.7
1991-92	3.9	33.5	62.6	10.0	44.9	45.1	3.5	32.8	63.6
1992-93	3.9	33.8	62.4	9.9	44.8	45.3	3.5	33.1	63.3
1993-94	3.5	32.5	64.0	9.7	43.0	47.3	3.2	31.9	64.9

Table A4.1g. Percent minority enrollment by region in rural, small, and other school districts, by year

	Total			Rural			Nonrural		
	Total	Small	Large	Total	Small	Large	Total	Small	Large
United States									
1987-88	30.5	12.0	31.1	15.2	11.5	16.2	32.9	15.7	33.0
1988-89	30.9	12.6	31.5	15.5	11.8	16.5	33.3	18.0	33.4
1989-90	31.4	12.4	32.0	15.3	11.2	16.3	33.9	19.5	34.0
1990-91	32.0	12.2	32.7	15.2	11.0	16.3	34.6	19.7	34.7
1991-92	32.5	12.5	33.2	15.4	11.2	16.5	35.1	20.0	35.2
1992-93	32.5	12.6	33.1	15.6	11.4	16.6	35.0	19.9	35.1
1993-94	33.9	13.3	34.5	16.0	11.9	17.1	36.6	21.5	36.7
Northeast									
1987-88	26.8	4.1	27.2	2.5	2.2	2.5	29.0	8.6	29.1
1988-89	26.9	4.8	27.3	2.7	3.0	2.7	29.1	8.6	29.2
1989-90	27.4	5.1	27.8	3.0	3.4	2.9	29.6	8.9	29.7
1990-91	27.9	4.4	28.3	2.9	2.5	3.0	30.1	9.0	30.2
1991-92	28.4	4.5	28.9	3.0	2.5	3.0	30.7	9.0	30.8
1992-93	28.5	4.5	28.9	3.0	2.5	3.0	30.7	9.0	30.9
1993-94	29.5	4.5	30.0	3.0	2.1	3.2	31.8	9.8	32.0
Southeast									
1987-88	33.9	24.1	33.9	24.6	26.7	24.6	35.8	20.4	35.8
1988-89	34.0	22.4	34.0	24.8	27.0	24.8	35.8	15.2	35.8
1989-90	34.2	23.3	34.2	24.6	27.3	24.6	36.1	17.5	36.1
1990-91	34.5	22.5	34.5	24.6	27.8	24.6	36.4	14.8	36.4
1991-92	34.6	22.1	34.6	24.6	27.3	24.6	36.5	14.6	36.5
1992-93	34.4	21.6	34.4	24.6	27.1	24.6	36.3	14.3	36.3
1993-94	36.3	22.5	36.4	25.2	27.5	25.2	38.5	15.9	38.5
South Central									
1987-88	42.7	25.0	44.0	26.2	25.1	27.0	45.3	23.8	45.5
1988-89	43.6	25.3	45.0	27.0	25.6	28.1	46.2	22.3	46.4
1989-90	43.5	23.2	45.0	25.1	23.5	26.4	46.4	20.7	46.7
1990-91	44.7	23.9	46.2	26.0	24.3	27.4	47.6	20.8	47.8
1991-92	45.3	24.0	46.7	26.4	24.5	27.8	48.2	19.8	48.4
1992-93	45.1	24.1	46.6	26.3	24.5	27.8	48.0	21.5	48.2
1993-94	46.6	24.9	48.1	27.1	25.3	28.4	49.7	21.8	49.9
Midwest									
1987-88	18.3	4.6	19.3	4.6	4.4	4.6	21.6	6.6	21.7
1988-89	18.3	4.5	19.2	4.5	4.4	4.6	21.6	6.2	21.6
1989-90	18.5	4.3	19.5	4.3	4.1	4.4	21.9	6.2	22.0
1990-91	18.6	3.5	19.6	3.8	3.4	4.0	22.1	4.9	22.2
1991-92	18.9	3.5	20.0	3.9	3.4	4.1	22.5	5.0	22.6
1992-93	18.9	3.6	19.9	3.9	3.5	4.1	22.4	5.1	22.5
1993-94	19.6	3.8	20.7	4.1	3.7	4.2	23.3	5.6	23.4
West									
1987-88	37.5	21.0	38.0	23.7	19.5	25.1	38.7	27.4	38.8
1988-89	38.5	23.1	39.0	23.8	19.9	25.0	39.8	32.6	39.8
1989-90	39.7	24.4	40.1	24.4	20.3	25.7	41.0	35.8	41.1
1990-91	40.8	25.1	41.3	24.7	20.7	26.0	42.2	37.3	42.2
1991-92	41.7	25.9	42.2	25.4	21.4	26.7	43.1	38.1	43.2
1992-93	41.6	25.5	42.0	25.8	21.2	27.3	42.9	37.4	43.0
1993-94	43.3	26.7	43.8	26.3	22.0	27.7	44.9	40.6	44.9

Table A4.2a. Number of students (in thousands) with IEPs in rural, small, and other school districts, by level and year

	Total				Rural				Nonrural			
	Total	Elem	Unified	Second	Total	Elem	Unified	Second	Total	Elem	Unified	Second
Total												
1987-88	3,689	179	3,439	70	516	25	486	5	3,173	154	2,953	65
1988-89	3,878	190	3,618	70	556	26	525	5	3,321	164	3,093	65
1989-90	4,070	194	3,806	70	584	28	551	5	3,485	166	3,255	65
1990-91	4,183	207	3,901	75	590	28	557	5	3,593	179	3,343	70
1991-92	4,274	210	3,988	76	607	29	573	5	3,667	181	3,415	71
1992-93	4,558	211	4,260	87	652	31	615	6	3,906	180	3,645	81
1993-94	4,736	223	4,424	89	670	31	633	6	4,066	193	3,791	82
Small												
1987-88	126	15	107	4	109	11	96	2	17	5	11	1
1988-89	133	17	112	4	114	11	101	2	19	5	11	2
1989-90	139	18	117	4	118	12	103	2	22	6	14	2
1990-91	138	18	116	4	117	12	103	2	21	6	13	2
1991-92	146	18	123	5	123	12	108	3	23	6	15	2
1992-93	155	19	129	6	129	12	113	4	26	7	16	3
1993-94	157	19	132	6	130	12	115	3	27	7	17	3
Large												
1987-88	3,563	164	3,332	67	407	14	390	3	3,156	150	2,942	64
1988-89	3,745	173	3,506	66	442	15	425	3	3,303	158	3,082	63
1989-90	3,931	176	3,689	66	467	16	448	3	3,464	160	3,241	63
1990-91	4,045	190	3,784	71	473	16	454	3	3,571	173	3,330	68
1991-92	4,128	192	3,864	72	484	17	464	3	3,644	175	3,400	69
1992-93	4,404	192	4,131	81	523	18	502	3	3,880	174	3,628	78
1993-94	4,579	204	4,293	82	540	19	519	3	4,040	186	3,774	79

Table A4.2b. Percentage of students with IEPs in rural, small, and other school districts, by level and year

	Total				Rural				Nonrural			
	Total	Elem	Unified	Second	Total	Elem	Unified	Second	Total	Elem	Unified	Second
Total												
1987-88	6.3	3.7	6.5	3.4	6.2	4.5	6.3	4.8	6.3	3.6	6.5	3.3
1988-89	7.0	3.9	7.3	3.7	7.5	5.1	7.6	5.2	7.0	3.7	7.2	3.6
1989-90	8.5	8.2	8.6	7.2	8.3	9.6	8.3	8.6	8.6	8.0	8.7	7.1
1990-91	9.3	8.5	9.4	7.8	9.5	9.4	9.5	8.4	9.3	8.4	9.4	7.7
1991-92	9.2	8.4	9.3	7.4	9.5	9.2	9.6	8.2	9.1	8.2	9.3	7.3
1992-93	9.7	8.3	9.8	8.5	10.2	10.3	10.2	9.4	9.6	8.1	9.7	8.5
1993-94	10.4	8.7	10.5	8.6	10.9	10.4	10.9	8.9	10.3	8.5	10.5	8.5
Small												
1987-88	7.5	6.1	7.7	6.2	7.5	6.0	7.7	4.6	7.5	6.4	7.8	9.5
1988-89	8.6	6.4	9.1	6.3	8.8	7.0	9.2	4.1	7.5	5.4	8.7	10.5
1989-90	9.6	9.4	9.5	10.5	9.4	10.9	9.2	8.8	10.6	7.3	13.0	14.0
1990-91	10.3	9.1	10.5	10.4	10.2	10.4	10.2	8.5	11.1	7.4	13.8	14.4
1991-92	10.7	8.9	11.1	9.7	10.6	10.0	10.7	8.0	11.6	7.5	14.8	13.3
1992-93	11.4	9.9	11.6	12.8	11.2	11.4	11.2	10.6	12.6	8.0	15.7	17.9
1993-94	11.7	10.0	11.9	12.7	11.4	11.5	11.5	9.5	13.2	8.0	16.5	21.1
Large												
1987-88	6.2	3.5	6.5	3.3	5.9	3.7	6.0	5.0	6.3	3.5	6.5	3.2
1988-89	7.0	3.7	7.2	3.5	7.1	4.0	7.3	6.1	6.9	3.7	7.2	3.4
1989-90	8.5	8.1	8.6	7.1	8.1	8.8	8.0	8.5	8.6	8.0	8.6	7.0
1990-91	9.3	8.5	9.4	7.7	9.3	8.8	9.4	8.3	9.3	8.4	9.4	7.6
1991-92	9.1	8.3	9.2	7.3	9.3	8.8	9.3	8.3	9.1	8.3	9.2	7.3
1992-93	9.6	8.2	9.7	8.3	9.9	9.7	9.9	8.1	9.6	8.1	9.7	8.3
1993-94	10.3	8.6	10.5	8.4	10.7	9.9	10.8	8.3	10.3	8.5	10.5	8.4

Table A4.3. Percentage of LEP students in rural, small, and other school districts in 1990, by region

	Total					Rural					Nonrural				
	NE	SE	SC	MW	West	NE	SE	SC	MW	West	NE	SE	SC	MW	West
Total	3.5	1.8	6.1	1.7	7.5	1.1	0.9	3.0	0.9	3.8	3.7	2.0	6.5	1.9	7.8
Small	0.9	1.2	1.9	0.8	2.5	0.7	1.1	1.9	0.8	2.5	1.3	1.5	1.6	0.7	2.6
Large	3.5	1.8	6.4	1.8	7.7	1.1	0.9	3.8	1.0	4.2	3.7	2.0	6.6	1.9	7.9

Table A4.4. Percentage of children in poverty in rural, small, and other school districts, by region and year

	Total						Rural						Nonrural					
	NE	SE	SC	MW	W	Total	NE	SE	SC	MW	W	Total	NE	SE	SC	MW	W	Total
Total																		
1986-87	15.4	20.9	24.3	16.3	17.3	18.4	13.3	24.5	24.9	15.6	19.6	19.7	15.5	20.2	24.2	16.5	17.1	18.2
1987-88	15.4	20.9	24.3	16.2	17.3	18.3	13.2	24.5	24.9	15.7	19.6	19.6	15.6	20.1	24.2	16.4	17.1	18.1
1988-89	15.4	20.7	24.2	16.1	17.3	18.3	13.2	24.3	24.9	15.6	19.5	19.6	15.6	20.0	24.1	16.2	17.1	18.1
1989-90	15.4	20.6	23.9	16.1	17.3	18.2	13.2	24.2	24.8	15.6	19.5	19.5	15.6	19.9	23.8	16.2	17.1	18.0
1990-91	15.4	20.5	24.0	16.0	17.3	18.2	13.1	24.0	24.9	15.6	19.4	19.4	15.6	19.8	23.9	16.1	17.1	18.0
1991-92	15.4	20.3	23.9	15.9	17.3	18.1	13.1	23.9	25.0	15.6	19.4	19.4	15.6	19.6	23.7	15.9	17.1	17.9
1992-93	15.3	20.2	23.8	15.8	17.2	18.0	13.1	23.8	24.9	15.6	19.3	19.3	15.5	19.5	23.7	15.8	17.1	17.8
1993-94	15.3	20.0	23.7	15.7	17.2	17.9	13.0	23.5	24.9	15.5	19.3	19.2	15.5	19.4	23.6	15.8	17.0	17.7
Small																		
1986-87	14.2	27.2	24.7	17.2	20.3	19.2	15.3	24.3	25.1	17.3	20.9	19.6	11.8	31.7	21.5	16.1	17.0	16.9
1987-88	14.3	28.0	24.6	17.2	20.3	19.2	15.2	25.1	25.1	17.3	20.9	19.6	12.2	32.2	20.7	16.2	17.4	17.0
1988-89	14.1	27.8	24.6	17.2	21.2	19.4	15.2	24.8	25.1	17.3	20.9	19.5	11.8	32.3	20.6	16.2	17.4	18.3
1989-90	14.2	28.6	24.6	17.1	21.3	19.4	15.2	26.2	25.1	17.2	20.9	19.5	12.0	32.1	20.5	16.0	22.2	18.5
1990-91	14.3	28.5	24.5	17.1	21.3	19.3	15.2	26.1	25.1	17.2	20.9	19.5	12.0	32.0	20.2	15.6	22.4	18.5
1991-91	14.2	28.4	24.5	17.1	21.5	19.4	15.2	26.1	25.1	17.2	20.9	19.5	11.8	31.8	19.9	15.6	22.7	18.5
1992-93	14.2	28.3	24.5	17.1	21.5	19.4	15.2	25.8	25.0	17.2	21.0	19.5	11.8	31.5	20.3	15.3	23.1	18.5
1993-94	14.0	28.3	24.4	17.1	21.7	19.5	15.1	26.0	25.0	17.3	21.1	19.6	11.7	31.5	20.2	15.5	23.0	18.6
Large																		
1986-87	15.4	20.9	24.3	16.3	17.3	18.4	13.0	24.5	24.7	14.9	19.1	19.7	15.6	20.2	24.3	16.5	23.3	18.2
1987-88	15.4	20.8	24.2	16.2	17.2	18.3	12.8	24.5	24.7	14.9	19.1	19.6	15.6	20.1	24.2	16.4	17.1	18.1
1988-89	15.4	20.7	24.2	16.0	17.2	18.2	12.9	24.3	24.8	14.9	19.0	19.6	15.6	20.0	24.1	16.2	17.1	18.1
1989-90	15.4	20.6	23.9	16.0	17.2	18.2	12.8	24.2	24.5	14.9	19.0	19.5	15.6	19.9	23.8	16.2	17.1	18.0
1990-91	15.4	20.4	24.0	15.9	17.2	18.1	12.7	24.0	24.8	14.9	18.9	19.4	15.6	19.7	23.9	16.1	17.1	18.0
1991-92	15.4	20.3	23.9	15.8	17.1	18.0	12.7	23.9	24.8	14.9	18.9	19.3	15.6	19.6	23.8	15.9	17.0	17.9
1992-93	15.3	20.2	23.8	15.7	17.1	18.0	12.7	23.7	24.8	14.8	18.7	19.3	15.5	19.5	23.7	15.8	17.0	17.8
1993-94	15.3	20.0	23.7	15.6	17.1	17.9	12.6	23.5	24.8	14.8	18.7	19.2	15.5	19.4	23.6	15.8	16.9	17.7

Table A4.5a. Student enrollment in high, medium, and low poverty rural, small, and other school districts, by year

	Total			Rural			Nonrural		
	Poverty			Poverty			Poverty		
	High	Medium	Low	High	Medium	Low	High	Medium	Low
Total									
1986-87	12,593,236	17,309,769	9,685,279	1,619,806	2,914,113	866,353	10,973,430	14,395,656	8,818,926
1987-88	12,558,629	17,456,088	9,734,711	1,606,756	2,911,173	879,107	10,951,873	14,544,915	8,855,604
1988-89	12,540,223	17,527,931	9,872,952	1,601,188	2,915,329	892,672	10,939,035	14,612,602	8,980,280
1989-90	12,541,276	17,748,180	10,021,498	1,587,883	2,931,732	903,370	10,953,393	14,816,448	9,118,128
1990-91	12,688,569	18,053,212	10,228,225	1,586,578	2,952,024	914,359	11,101,991	15,101,188	9,313,866
1991-92	12,816,565	18,484,830	10,511,148	1,598,386	3,001,486	934,645	11,218,179	15,483,344	9,576,503
1992-93	12,933,062	18,829,196	10,809,806	1,611,480	3,053,887	963,183	11,321,582	15,775,309	9,846,623
1993-94	13,015,028	19,166,280	11,015,770	1,623,582	3,104,956	981,998	11,391,446	16,061,324	10,033,772
Small									
1986-87	372,288	725,822	195,519	331,737	640,148	150,762	40,551	85,674	44,757
1987-88	369,920	711,550	193,500	330,464	631,568	150,616	39,456	79,982	42,884
1988-89	384,070	710,847	197,191	328,245	629,457	151,518	55,825	81,390	45,673
1989-90	385,312	710,556	197,418	326,965	629,909	151,944	58,347	80,647	45,474
1990-91	383,877	709,659	199,709	324,641	630,810	151,701	59,236	78,849	48,008
1991-92	389,610	717,922	201,361	328,790	637,584	152,779	60,820	80,338	48,582
1992-93	396,926	722,650	205,670	334,329	641,933	154,501	62,597	80,717	51,169
1993-94	400,300	723,278	203,794	336,710	640,586	154,050	63,590	82,692	49,744
Large									
1986-87	12,220,948	16,583,947	9,489,760	1,288,069	2,273,965	715,591	10,932,879	14,309,982	8,774,169
1987-88	12,188,709	16,744,538	9,541,211	1,276,292	2,279,605	728,491	10,912,417	14,464,933	8,812,720
1988-89	12,156,153	16,817,084	9,675,761	1,272,943	2,285,872	741,154	10,883,210	14,531,212	8,934,607
1989-90	12,155,964	17,037,624	9,824,080	1,260,918	2,301,823	751,426	10,895,046	14,735,801	9,072,654
1990-91	12,304,692	17,343,553	10,028,516	1,261,937	2,321,214	762,658	11,042,755	15,022,339	9,265,858
1991-92	12,426,955	17,766,908	10,309,787	1,269,596	2,363,902	781,866	11,157,359	15,403,006	9,527,921
1992-93	12,536,136	18,106,546	10,604,136	1,277,151	2,411,954	808,682	11,258,985	15,694,592	9,795,454
1993-94	12,614,728	18,443,002	10,811,976	1,286,872	2,464,370	827,948	11,327,856	15,978,632	9,984,028

Table A4.5b. Percentage distributions of student enrollment in high, medium, and low poverty rural, small, and other school districts, by year

	Total			Rural			Nonrural		
		Poverty			Poverty			Poverty	
	High	Medium	Low	High	Medium	Low	High	Medium	Low
Total									
1986-87	31.8	43.7	24.5	30.0	54.0	16.0	32.1	42.1	25.8
1987-88	31.6	43.9	24.5	29.8	53.9	16.3	31.9	42.3	25.8
1988-89	31.4	43.9	24.7	29.6	53.9	16.5	31.7	42.3	26.0
1989-90	31.1	44.0	24.9	29.3	54.1	16.7	31.4	42.5	26.1
1990-91	31.0	44.1	25.0	29.1	54.1	16.8	31.3	42.5	26.2
1991-92	30.7	44.2	25.1	28.9	54.2	16.9	30.9	42.7	26.4
1992-93	30.4	44.2	25.4	28.6	54.3	17.1	30.6	42.7	26.7
1993-94	30.1	44.4	25.5	28.4	54.4	17.2	30.4	42.8	26.8
Small									
1986-87	28.8	56.1	15.1	29.5	57.0	13.4	23.7	50.1	26.2
1987-88	29.0	55.8	15.2	29.7	56.8	13.5	24.3	49.3	26.4
1988-89	29.7	55.0	15.3	29.6	56.7	13.7	30.5	44.5	25.0
1989-90	29.8	54.9	15.3	29.5	56.8	13.7	31.6	43.7	24.7
1990-91	29.7	54.9	15.4	29.3	57.0	13.7	31.8	42.4	25.8
1991-92	29.8	54.8	15.4	29.4	57.0	13.7	32.1	42.3	25.6
1992-93	30.0	54.5	15.5	29.6	56.8	13.7	32.2	41.5	26.3
1993-94	30.2	54.5	15.4	29.8	56.6	13.6	32.4	42.2	25.4
Large									
1986-87	31.9	43.3	24.8	30.1	53.2	16.7	32.1	42.1	25.8
1987-88	31.7	43.5	24.8	29.8	53.2	17.0	31.9	42.3	25.8
1988-89	31.5	43.5	25.0	29.6	53.2	17.2	31.7	42.3	26.0
1989-90	31.2	43.7	25.2	29.2	53.4	17.4	31.4	42.5	26.1
1990-91	31.0	43.7	25.3	29.0	53.4	17.5	31.3	42.5	26.2
1991-92	30.7	43.9	25.5	28.8	53.5	17.7	30.9	42.7	26.4
1992-93	30.4	43.9	25.7	28.4	53.6	18.0	30.6	42.7	26.7
1993-94	30.1	44.0	25.8	28.1	53.8	18.1	30.4	42.8	26.8

Table A5.1. Student/teacher ratios in rural, small, and other school districts, by level and year

	Total				Rural				Nonrural			
	Total	Elem	Unified	Second	Total	Elem	Unified	Second	Total	Elem	Unified	Second
Total												
1987-88	17.7	19.1	17.6	18.4	16.2	16.1	16.2	13.5	17.9	19.6	17.8	18.9
1988-89	17.6	19.1	17.5	18.2	16.1	15.8	16.2	13.2	17.8	19.6	17.7	18.6
1989-90	17.4	19.1	17.3	18.0	15.9	15.6	15.9	12.8	17.6	19.7	17.5	18.5
1990-91	17.3	19.0	17.2	18.6	15.8	15.6	15.8	13.3	17.6	19.6	17.4	19.1
1991-92	17.6	19.4	17.4	19.0	16.0	16.2	16.0	14.1	17.8	20.0	17.7	19.5
1992-93	17.7	19.1	17.6	17.8	16.2	15.7	16.3	12.4	18.0	19.7	17.9	18.3
1993-94	17.5	19.1	17.4	17.7	16.0	15.6	16.0	12.9	17.8	19.6	17.7	18.3
Small												
1987-88	13.2	13.3	13.3	10.5	13.2	12.9	13.3	11.0	12.7	14.1	12.6	9.5
1988-89	13.3	14.2	13.3	11.1	13.2	13.1	13.3	11.2	13.6	15.9	12.7	10.9
1989-90	13.1	14.2	13.0	10.4	13.0	13.0	13.0	10.6	13.6	16.1	12.5	9.9
1990-91	13.0	14.1	12.9	10.8	12.9	12.9	13.0	11.2	13.6	16.0	12.6	10.2
1991-92	13.3	14.5	13.1	11.5	13.2	13.2	13.2	12.2	13.9	16.5	12.9	10.3
1992-93	13.6	14.3	13.6	11.2	13.6	13.1	13.7	11.5	14.0	16.4	13.0	10.4
1993-94	13.4	14.3	13.4	11.6	13.3	12.9	13.4	12.3	14.0	16.6	12.9	10.2
Large												
1987-88	17.9	19.8	17.8	19.0	17.2	18.9	17.1	16.4	18.0	19.9	17.9	19.1
1988-89	17.8	19.6	17.6	18.7	17.1	18.0	17.1	15.3	17.9	19.8	17.7	18.9
1989-90	17.6	19.7	17.4	18.6	16.8	17.7	16.8	15.2	17.7	19.9	17.5	18.7
1990-91	17.5	19.6	17.4	19.2	16.8	17.9	16.7	15.9	17.6	19.7	17.4	19.3
1991-92	17.8	20.0	17.6	19.6	17.0	18.5	16.9	16.3	17.9	20.1	17.7	19.7
1992-93	17.9	19.7	17.8	18.3	17.0	17.8	17.0	13.4	18.0	19.9	17.9	18.5
1993-94	17.7	19.6	17.6	18.2	16.8	17.7	16.8	13.5	17.8	19.8	17.7	18.5

Table A5.2. Per-pupil revenues in rural, small, and other school districts, by level and year

	Total				Rural				Nonrural			
	Total	Elem	Unified	Second	Total	Elem	Unified	Second	Total	Elem	Unified	Second
Total												
1989-90	$5,793	$5,801	$5,746	$7,664	$5,268	$6,480	$5,157	$8,718	$5,874	$5,707	$5,839	$7,588
1990-91	$5,739	$5,578	$5,703	$7,619	$5,306	$6,344	$5,207	$8,691	$5,805	$5,476	$5,781	$7,546
1991-92	$5,589	$5,570	$5,546	$7,388	$5,173	$6,253	$5,070	$8,758	$5,653	$5,478	$5,621	$7,296
1992-93	$5,793	$5,657	$5,762	$7,372	$5,422	$6,367	$5,332	$8,408	$5,849	$5,563	$5,829	$7,299
Small												
1989-90	$6,003	$6,696	$5,790	$8,412	$5,932	$6,836	$5,758	$8,541	$6,434	$6,514	$6,138	$8,114
1990-91	$6,028	$6,633	$5,832	$8,413	$5,975	$6,920	$5,795	$8,652	$6,354	$6,265	$6,248	$7,840
1991-92	$5,940	$6,521	$5,750	$8,328	$5,885	$6,762	$5,718	$8,445	$6,279	$6,211	$6,101	$8,067
1992-92	$6,266	$6,715	$6,136	$7,527	$6,220	$6,917	$6,104	$7,473	$6,548	$6,448	$6,492	$7,672
Large												
1989-90	$5,786	$5,723	$5,745	$7,631	$5,098	$6,266	$5,016	$8,857	$5,871	$5,674	$5,838	$7,581
1990-91	$5,730	$5,490	$5,700	$7,585	$5,136	$6,011	$5,069	$8,726	$5,802	$5,445	$5,780	$7,543
1991-92	$5,578	$5,491	$5,540	$7,347	$4,992	$5,962	$4,918	$9,019	$5,650	$5,450	$5,619	$7,285
1992-93	$5,778	$5,572	$5,752	$7,365	$5,223	$6,054	$5,155	$9,322	$5,846	$5,530	$5,828	$7,295

Table A5.3a. Per-pupil revenues in rural, small, and other school districts, by region

	Total			Rural			Nonrural		
	Total	Small	Large	Total	Small	Large	Total	Small	Large
United States									
1989-90	$5,793	$6,003	$5,786	$5,268	$5,932	$5,098	$5,874	$6,434	$5,871
1990-91	$5,739	$6,028	$5,730	$5,306	$5,975	$5,136	$5,805	$6,354	$5,802
1991-92	$5,589	$5,940	$5,578	$5,173	$5,885	$4,992	$5,653	$6,279	$5,650
1992-93	$5,793	$6,266	$5,778	$5,422	$6,220	$5,223	$5,849	$6,548	$5,846
Northeast									
1989-90	$8,110	$8,752	$8,098	$7,102	$8,433	$6,859	$8,199	$9,491	$8,192
1990-91	$7,982	$9,058	$7,962	$7,261	$8,770	$6,989	$8,046	$9,730	$8,036
1991-92	$7,859	$8,850	$7,840	$7,186	$8,512	$6,943	$7,918	$9,630	$7,908
1992-93	$7,986	$8,899	$7,969	$7,302	$8,589	$7,068	$8,046	$9,619	$8,037
Southeast									
1989-90	$5,185	$4,434	$5,186	$4,498	$4,537	$4,497	$5,320	$4,292	$5,321
1990-91	$5,169	$4,453	$5,170	$4,585	$4,441	$4,586	$5,282	$4,470	$5,282
1991-92	$5,008	$4,337	$5,009	$4,394	$4,321	$4,394	$5,126	$4,359	$5,126
1992-93	$5,026	$5,193	$5,026	$4,575	$5,198	$4,572	$5,112	$5,185	$5,112
South Central									
1989-90	$4,595	$5,070	$4,561	$4,815	$5,077	$4,609	$4,561	$5,015	$4,557
1990-91	$4,667	$5,276	$4,625	$5,008	$5,304	$4,780	$4,615	$5,059	$4,611
1991-92	$4,630	$5,332	$4,582	$5,028	$5,365	$4,772	$4,570	$5,071	$4,566
1992-93	$5,442	$6,529	$5,368	$6,018	$6,590	$5,590	$5,355	$6,049	$5,349
Midwest									
1989-90	$5,621	$5,502	$5,629	$5,128	$5,505	$4,960	$5,737	$5,464	$5,739
1990-91	$5,602	$5,437	$5,613	$5,102	$5,439	$4,953	$5,719	$5,415	$5,721
1991-92	$5,427	$5,338	$5,433	$4,942	$5,343	$4,766	$5,541	$5,281	$5,543
1992-93	$5,736	$5,431	$5,756	$5,147	$5,427	$5,026	$5,874	$5,474	$5,876
West									
1989-90	$5,422	$7,093	$5,378	$6,374	$7,415	$6,033	$5,342	$6,171	$5,336
1990-91	$5,292	$6,979	$5,248	$6,199	$7,382	$5,816	$5,216	$5,809	$5,212
1991-92	$5,111	$6,751	$5,069	$6,064	$7,129	$5,724	$5,031	$5,643	$5,027
1992-93	$5,186	$6,731	$5,146	$6,066	$7,058	$5,756	$5,110	$5,706	$5,106

Table A5.3b. Per-pupil revenues in rural, small, and other school districts, by state in 1992-93

	Total			Small			Large		
	Total	Rural	Nonrural	Total	Rural	Nonrural	Total	Rural	Nonrural
50 States and D.C.	$5,793	$6,266	$5,778	$5,422	$6,220	$5,223	$5,849	$6,548	$5,846
Alabama	$3,885	n/a	$3,885	$3,721	n/a	$3,721	$3,937	n/a	$3,937
Alaska	$9,717	$14919	$9,165	$12099	$14919	$11171	$8,208	n/a	$8,208
Arizona	$5,035	$6,370	$5,009	$6,172	$6,552	$6,061	$4,960	$5,860	$4,955
Arkansas	$4,345	$5,336	$4,200	$4,651	$5,381	$4,054	$4,235	$4,734	$4,229
California	$5,155	$5,823	$5,147	$5,622	$6,715	$5,452	$5,137	$5,229	$5,137
Colorado	$5,596	$6,783	$5,547	$6,375	$6,771	$6,201	$5,482	$7,183	$5,480
Connecticut	$8,595	$12050	$8,574	$10346	$12218	$9,996	$8,549	$11698	$8,543
Delaware	$6,554	n/a	$6,554	$7,542	n/a	$7,542	$6,355	n/a	$6,355
District of Columbia	$8,782	n/a	$8,782	n/a	n/a	n/a	$8,782	n/a	$8,782
Florida	$5,713	n/a	$5,713	$5,542	n/a	$5,542	$5,717	n/a	$5,717
Georgia	$5,098	$5,926	$5,097	$4,717	$5,926	$4,708	$5,157	n/a	$5,157
Hawaii	$5,973	n/a	$5,973	n/a	n/a	n/a	$5,973	n/a	$5,973
Idaho	$3,826	$4,887	$3,760	$4,114	$4,847	$3,924	$3,717	$5,831	$3,710
Illinois	$5,503	$4,563	$5,547	$4,344	$4,478	$4,264	$5,628	$4,937	$5,634
Indiana	$6,027	$5,869	$6,028	$5,515	$6,019	$5,509	$6,129	$5,697	$6,129
Iowa	$5,437	$5,834	$5,347	$5,701	$5,852	$5,470	$5,329	$5,481	$5,327
Kansas	$5,287	$5,931	$5,183	$5,445	$5,945	$5,186	$5,186	$5,642	$5,182
Kentucky	$4,774	$5,369	$4,769	$4,656	$5,490	$4,645	$4,818	$5,290	$4,815
Louisiana	$4,302	n/a	$4,302	$4,340	n/a	$4,340	$4,299	n/a	$4,299
Maine	$6,375	$7,362	$6,282	$6,677	$7,484	$6,337	$6,277	$6,712	$6,269
Maryland	$6,520	n/a	$6,520	$6,059	n/a	$6,059	$6,577	n/a	$6,577
Massachusetts	$6,859	$7,932	$6,848	$6,857	$6,312	$6,903	$6,859	$8,425	$6,847
Michigan	$6,340	$5,723	$6,352	$5,264	$5,731	$5,200	$6,506	$5,679	$6,508
Minnesota	$5,941	$5,916	$5,943	$5,646	$5,919	$5,491	$6,023	$5,775	$6,024
Mississippi	$3,617	$5,206	$3,614	$3,643	$5,206	$3,633	$3,604	n/a	$3,604
Missouri	$4,370	$3,835	$4,426	$3,510	$3,809	$3,311	$4,623	$4,491	$4,624
Montana	$5,047	$5,962	$4,770	$5,542	$5,985	$4,898	$4,779	$5,761	$4,741
Nebraska	$5,583	$6,130	$5,375	$5,845	$6,154	$4,950	$5,450	$5,888	$5,432
Nevada	$3,563	$10556	$3,534	$5,064	$10556	$4,820	$3,402	n/a	$3,402
New Hampshire	$6,167	$7,354	$6,086	$6,723	$7,811	$6,401	$6,036	$6,385	$6,027
New Jersey	$9,831	$12139	$9,805	$9,929	$11981	$9,753	$9,827	$12201	$9,807
New Mexico	$4,462	$6,811	$4,369	$5,269	$6,811	$4,850	$4,286	n/a	$4,286
New York	$8,494	$9,470	$8,475	$8,111	$9,198	$7,818	$8,521	$10201	$8,512
North Carolina	$5,009	n/a	$5,009	$4,902	n/a	$4,902	$5,038	n/a	$5,038
North Dakota	$4,602	$5,300	$4,221	$5,172	$5,300	$4,600	$4,168	n/a	$4,168
Ohio	$5,894	$4,756	$5,901	$4,793	$4,649	$4,797	$6,125	$5,290	$6,126
Oklahoma	$4,534	$5,857	$4,274	$5,281	$5,969	$4,194	$4,317	$5,274	$4,283
Oregon	$5,815	$6,583	$5,771	$6,379	$6,648	$6,002	$5,779	$6,470	$5,765
Pennsylvania	$6,873	$6,840	$6,873	$6,118	$6,184	$6,117	$6,986	$7,916	$6,985
Rhode Island	$6,592	$13912	$6,586	$7,638	$13912	$7,519	$6,539	n/a	$6,539
South Carolina	$4,765	$5,045	$4,765	$4,805	$5,045	$4,801	$4,759	n/a	$4,759
South Dakota	$4,459	$5,008	$4,246	$4,855	$4,991	$4,568	$4,187	$6,991	$4,175
Tennessee	$3,856	$3,284	$3,857	$3,423	$3,457	$3,423	$3,932	$3,020	$3,932
Texas	$5,726	$7,484	$5,656	$6,741	$7,499	$6,328	$5,615	$7,348	$5,607
Utah	$3,539	$6,720	$3,525	$4,921	$6,720	$4,798	$3,441	n/a	$3,441
Vermont	$7,998	$8,197	$7,929	$8,241	$8,185	$8,364	$7,873	$8,310	$7,857
Virginia	$5,203	$4,970	$5,204	$4,526	$4,528	$4,526	$5,414	$5,326	$5,414
Washington	$5,850	$6,922	$5,810	$6,010	$6,935	$5,752	$5,821	$6,714	$5,819
West Virginia	$5,753	n/a	$5,753	$5,650	n/a	$5,650	$5,819	n/a	$5,819
Wisconsin	$6,436	$6,861	$6,412	$6,370	$6,845	$6,225	$6,454	$7,047	$6,451
Wyoming	$6,131	$9,042	$5,977	$7,283	$8,229	$7,021	$5,855	$13198	$5,780

Table A5.4. Percentage of local, state, and federal revenues in rural, small, and other school districts by year

	Total			Rural			Nonrural		
	Local	State	Federal	Local	State	Federal	Local	State	Federal
Total									
1989-90	47.2	47.1	5.7	40.6	52.6	6.8	48.1	46.3	5.5
1990-91	47.3	46.9	5.8	40.1	53.1	6.9	48.3	46.0	5.7
1991-92	48.0	45.6	6.4	40.8	51.8	7.4	49.0	44.8	6.2
1992-93	47.4	46.4	6.2	39.5	53.3	7.3	48.5	45.4	6.1
Small									
1989-90	47.7	45.9	6.1	47.4	46.2	6.4	49.6	44.2	4.8
1990-91	46.5	47.3	6.2	45.8	47.8	6.4	50.7	44.4	5.0
1991-92	47.3	46.1	6.6	46.5	46.6	6.9	51.6	43.3	5.1
1992-93	45.0	48.4	6.6	44.2	49.0	6.8	50.2	44.7	5.2
Large									
1989-90	47.2	47.1	5.7	38.6	54.5	6.9	48.1	46.3	5.5
1990-91	47.3	46.9	5.8	38.4	54.6	7.0	48.3	46.0	5.7
1991-92	48.0	45.6	6.4	39.1	53.4	7.6	49.0	44.8	6.2
1992-93	47.5	46.3	6.2	38.1	54.5	7.4	48.5	45.4	6.1

Table A5.5. Percentage of students enrolled in low, medium, and high per-pupil revenue districts in rural, small, and other school districts, by year

	Total			Rural			Nonrural		
	Low	Medium	High	Low	Medium	High	Low	Medium	High
Total									
1989-90	22.0	58.1	20.0	33.5	55.7	10.8	20.2	58.4	21.4
1990-91	22.1	58.9	19.0	31.8	57.4	10.7	20.6	59.1	20.3
1991-92	22.7	58.9	18.4	34.9	54.0	11.1	20.8	59.7	19.5
1992-93	25.0	58.4	16.6	34.8	54.1	11.1	23.5	59.1	17.4
Small									
1989-90	21.8	57.0	21.2	21.9	57.8	20.3	21.0	52.0	27.0
1990-91	22.1	56.3	21.6	22.2	57.1	20.7	20.9	52.1	27.0
1991-92	22.1	56.1	21.9	22.3	56.5	21.2	20.9	53.2	25.9
1992-93	17.8	58.9	23.3	18.1	59.1	22.9	16.3	58.1	25.6
Large									
1989-90	22.0	58.1	19.9	36.5	55.2	8.4	20.2	58.5	21.4
1990-91	22.1	59.0	18.9	34.3	57.5	8.2	20.6	59.1	20.2
1991-92	22.7	59.0	18.3	38.1	53.3	8.6	20.8	59.7	19.5
1992-93	25.2	58.4	16.4	39.0	52.9	8.1	23.5	59.1	17.4

Table A5.6. Student/teacher ratios in low, medium, and high per-pupil revenue districts in rural, small, and other school districts, by year

	Total			Rural			Nonrural		
	Low	Medium	High	Low	Medium	High	Low	Medium	High
Total									
1989-90	18.5	17.8	15.2	17.4	15.7	13.2	18.8	18.2	15.4
1990-91	18.5	17.7	15.2	17.4	15.7	12.9	18.8	18.0	15.4
1991-92	18.5	18.0	15.5	17.2	15.9	13.5	18.9	18.3	15.7
1992-93	18.9	18.1	15.2	17.3	16.2	13.3	19.2	18.4	15.4
Small									
1989-90	14.4	13.4	11.2	14.3	13.2	11.3	15.4	14.8	10.8
1990-91	14.7	13.3	11.1	14.5	13.1	11.2	15.7	14.7	10.9
1991-92	14.8	13.6	11.4	14.5	13.4	11.5	16.3	15.0	11.1
1992-93	15.0	14.3	11.5	14.7	14.1	11.6	17.2	15.1	10.9
Large									
1989-90	18.7	18.0	15.4	17.9	16.5	14.8	18.8	18.2	15.4
1990-91	18.7	17.9	15.4	17.9	16.5	14.3	18.8	18.1	15.5
1991-92	18.7	18.2	15.7	17.7	16.7	15.2	18.9	18.3	15.7
1992-93	19.0	18.3	15.4	17.7	16.8	14.9	19.3	18.4	15.5

Table A5.7. Per-pupil expenditures in rural, small, and other school districts, by level and year

	Total				Rural				Nonrural			
	Total	Elem	Unified	Second	Total	Elem	Unified	Second	Total	Elem	Unified	Second
Total												
1989-90	$5,885	$5,803	$5,849	$7,542	$5,315	$6,418	$5,215	$8,393	$5,973	$5,719	$5,949	$7,481
1990-91	$5,767	$5,651	$5,731	$7,549	$5,283	$6,309	$5,188	$8,378	$5,841	$5,564	$5,816	$7,493
1991-92	$5,685	$5,699	$5,640	$7,458	$5,244	$6,295	$5,148	$8,421	$5,752	$5,619	$5,717	$7,393
1992-93	$5,714	$5,518	$5,688	$7,293	$5,324	$6,109	$5,245	$8,245	$5,773	$5,441	$5,757	$7,226
Small												
1989-90	$6,039	$6,6[illegible]	$5,846	$8,250	$5,984	$6,853	$5,819	$8,413	$6,376	$6,406	$6,149	$7,872
1990-91	$5,980	$6,610	$5,791	$8,037	$5,924	$6,840	$5,757	$8,259	$6,317	$6,315	$6,166	$7,506
1991-92	$5,993	$6,566	$5,823	$7,885	$5,939	$6,771	$5,794	$7,916	$6,324	$6,301	$6,143	$7,816
1992-93	$6,004	$6,369	$5,876	$7,568	$5,978	$6,616	$5,857	$7,558	$6,164	$6,041	$6,088	$7,594
Large												
1989-90	$5,880	$5,729	$5,849	$7,511	$5,144	$6,158	$5,072	$8,378	$5,971	$5,691	$5,948	$7,476
1990-91	$5,760	$5,572	$5,729	$7,528	$5,120	$6,003	$5,054	$8,481	$5,839	$5,534	$5,815	$7,493
1991-92	$5,675	$5,627	$5,635	$7,439	$5,068	$6,023	$4,996	$8,842	$5,749	$5,592	$5,716	$7,387
1992-93	$5,705	$5,450	$5,682	$7,280	$5,161	$5,820	$5,104	$8,915	$5,771	$5,418	$5,756	$7,221

Table A5.8a. Per-pupil expenditures in rural, small, and other school districts, by region

	Total			Rural			Nonrural		
	Total	Small	Large	Total	Small	Large	Total	Small	Large
United States									
1989-90	$5,885	$6,039	$5,880	$5,315	$5,984	$5,144	$5,973	$6,376	$5,971
1990-91	$5,767	$5,980	$5,760	$5,283	$5,924	$5,120	$5,841	$6,317	$5,839
1991-92	$5,685	$5,993	$5,675	$5,244	$5,939	$5,068	$5,752	$6,324	$5,749
1992-93	$5,714	$6,004	$5,705	$5,324	$5,978	$5,161	$5,773	$6,164	$5,771
Northeast									
1989-90	$8,182	$8,947	$8,168	$7,334	$8,752	$7,075	$8,257	$9,400	$8,250
1990-91	$7,970	$8,954	$7,952	$7,416	$8,770	$7,172	$8,019	$9,382	$8,011
1991-92	$7,885	$8,664	$7,871	$7,216	$8,353	$7,008	$7,944	$9,382	$7,936
1992-93	$7,854	$8,462	$7,843	$7,187	$8,204	$7,003	$7,912	$9,059	$7,906
Southeast									
1989-90	$5,276	$4,480	$5,277	$4,547	$4,588	$4,547	$5,419	$4,331	$5,420
1990-91	$5,211	$4,295	$5,212	$4,563	$4,373	$4,564	$5,336	$4,183	$5,337
1991-92	$5,019	$4,238	$5,020	$4,481	$4,304	$4,482	$5,122	$4,143	$5,122
1992-93	$4,962	$4,405	$4,962	$4,573	$4,477	$4,573	$5,035	$4,302	$5,036
South Central									
1989-90	$4,908	$5,319	$4,879	$5,038	$5,322	$4,816	$4,888	$5,303	$4,885
1990-91	$4,581	$5,123	$4,544	$4,823	$5,147	$4,573	$4,545	$4,938	$4,541
1991-92	$4,729	$5,245	$4,694	$4,982	$5,260	$4,769	$4,691	$5,120	$4,688
1992-93	$4,929	$5,327	$4,902	$5,151	$5,369	$4,987	$4,895	$4,992	$4,894
Midwest									
1989-90	$5,652	$5,465	$5,664	$5,107	$5,474	$4,943	$5,781	$5,356	$5,783
1990-91	$5,574	$5,460	$5,582	$5,059	$5,461	$4,880	$5,695	$5,453	$5,697
1991-92	$5,606	$5,537	$5,611	$5,083	$5,548	$4,878	$5,729	$5,406	$5,731
1992-93	$5,753	$5,581	$5,764	$5,229	$5,587	$5,075	$5,875	$5,498	$5,878
West									
1989-90	$5,489	$6,973	$5,450	$6,295	$7,321	$5,960	$5,421	$5,976	$5,417
1990-91	$5,451	$6,900	$5,413	$6,211	$7,217	$5,885	$5,388	$5,977	$5,383
1991-92	$5,265	$6,724	$5,227	$6,044	$7,027	$5,731	$5,199	$5,837	$5,195
1992-93	$5,238	$6,650	$5,202	$5,921	$7,006	$5,582	$5,179	$5,534	$5,177

Table A5.8b. Per-pupil expenditures by state in rural, small, and other school districts, by state in 1992

	Total			Small			Large		
	Total	Rural	Nonrural	Total	Rural	Nonrural	Total	Rural	Nonrural
50 States and D.C.	$5,714	$6,004	$5,705	$5,324	$5,978	$5,161	$5,773	$6,164	$5,771
Alabama	$3,853	n/a	$3,853	$3,734	n/a	$3,734	$3,891	n/a	$3,891
Alaska	$8,802	$14325	$8,215	$10958	$14325	$9,850	$7,435	n/a	$7,435
Arizona	$5,081	$6,747	$5,048	$6,070	$6,936	$5,815	$5,016	$6,214	$5,009
Arkansas	$4,262	$4,615	$4,210	$4,356	$4,627	$4,134	$4,228	$4,458	$4,225
California	$5,155	$5,500	$5,151	$5,412	$6,433	$5,254	$5,145	$4,878	$5,147
Colorado	$5,352	$6,285	$5,313	$5,446	$6,280	$5,081	$5,338	$6,439	$5,336
Connecticut	$8,530	$10904	$8,515	$9,395	$11000	$9,095	$8,507	$10701	$8,502
Delaware	$6,635	n/a	$6,635	$7,168	n/a	$7,168	$6,527	n/a	$6,527
District of Columbia	$9,230	n/a	$9,230	n/a	n/a	n/a	$9,230	n/a	$9,230
Florida	$5,638	n/a	$5,638	$5,354	n/a	$5,354	$5,645	n/a	$5,645
Georgia	$4,931	$4,637	$4,931	$4,593	$4,637	$4,592	$4,983	n/a	$4,983
Hawaii	$5,991	n/a	$5,991	n/a	n/a	n/a	$5,991	n/a	$5,991
Idaho	$3,805	$4,902	$3,736	$4,019	$4,859	$3,802	$3,724	$5,914	$3,716
Illinois	$5,669	$4,506	$5,723	$4,380	$4,435	$4,348	$5,807	$4,821	$5,817
Indiana	$5,827	$5,693	$5,827	$5,357	$5,764	$5,351	$5,920	$5,612	$5,920
Iowa	$5,406	$5,698	$5,340	$5,649	$5,710	$5,556	$5,307	$5,462	$5,305
Kansas	$5,509	$6,617	$5,330	$5,788	$6,633	$5,348	$5,332	$6,297	$5,322
Kentucky	$4,476	$4,170	$4,479	$4,376	$4,448	$4,375	$4,513	$3,986	$4,517
Louisiana	$4,187	n/a	$4,187	$4,331	n/a	$4,331	$4,174	n/a	$4,174
Maine	$6,084	$6,876	$6,009	$6,337	$6,882	$6,107	$6,002	$6,842	$5,987
Maryland	$6,436	n/a	$6,436	$6,004	n/a	$6,004	$6,489	n/a	$6,489
Massachusetts	$6,216	$7,150	$6,207	$6,405	$5,943	$6,443	$6,210	$7,517	$6,201
Michigan	$6,423	$5,970	$6,431	$5,371	$5,977	$5,289	$6,584	$5,931	$6,587
Minnesota	$6,351	$6,294	$6,356	$6,189	$6,307	$6,122	$6,397	$5,747	$6,398
Mississippi	$3,538	$4,143	$3,537	$3,587	$4,143	$3,584	$3,512	n/a	$3,512
Missouri	$4,778	$4,138	$4,845	$3,820	$4,109	$3,626	$5,060	$4,874	$5,061
Montana	$5,132	$6,175	$4,816	$5,807	$6,211	$5,222	$4,766	$5,870	$4,723
Nebraska	$5,589	$6,030	$5,422	$5,785	$6,072	$4,956	$5,489	$5,607	$5,485
Nevada	$5,430	$10037	$5,411	$6,193	$10037	$6,022	$5,348	n/a	$5,348
New Hampshire	$5,920	$7,156	$5,835	$6,401	$7,641	$6,034	$5,807	$6,131	$5,798
New Jersey	$9,392	$11254	$9,371	$9,330	$11104	$9,178	$9,395	$11312	$9,379
New Mexico	$4,418	$6,467	$4,336	$5,148	$6,467	$4,790	$4,259	n/a	$4,259
New York	$8,508	$9,239	$8,494	$7,951	$9,043	$7,656	$8,547	$9,767	$8,541
North Carolina	$4,845	n/a	$4,845	$4,846	n/a	$4,846	$4,844	n/a	$4,844
North Dakota	$4,648	$5,273	$4,307	$5,194	$5,273	$4,843	$4,232	n/a	$4,232
Ohio	$5,332	$4,594	$5,337	$4,444	$4,518	$4,442	$5,519	$4,976	$5,519
Oklahoma	$4,368	$4,987	$4,246	$4,767	$5,082	$4,270	$4,252	$4,495	$4,243
Oregon	$5,785	$6,454	$5,747	$6,184	$6,446	$5,816	$5,760	$6,467	$5,745
Pennsylvania	$7,000	$6,634	$7,001	$6,380	$6,079	$6,383	$7,093	$7,543	$7,093
Rhode Island	$6,391	$11480	$6,387	$6,779	$11480	$6,690	$6,372	n/a	$6,372
South Carolina	$4,577	$4,914	$4,576	$4,642	$4,914	$4,638	$4,567	n/a	$4,567
South Dakota	$4,571	$5,230	$4,316	$5,063	$5,228	$4,713	$4,234	$5,467	$4,229
Tennessee	$3,800	$2,935	$3,801	$3,244	$3,021	$3,244	$3,897	$2,805	$3,898
Texas	$5,103	$5,853	$5,073	$5,554	$5,865	$5,384	$5,053	$5,736	$5,050
Utah	$3,523	$6,753	$3,509	$4,479	$6,753	$4,324	$3,455	n/a	$3,455
Vermont	$7,539	$7,641	$7,504	$7,733	$7,620	$7,985	$7,439	$7,851	$7,424
Virginia	$5,566	$5,126	$5,567	$5,066	$4,756	$5,067	$5,722	$5,425	$5,722
Washington	$6,243	$7,377	$6,201	$6,430	$7,366	$6,169	$6,209	$7,553	$6,206
West Virginia	$5,733	n/a	$5,733	$5,725	n/a	$5,725	$5,738	n/a	$5,738
Wisconsin	$6,644	$7,220	$6,612	$6,676	$7,187	$6,521	$6,636	$7,589	$6,631
Wyoming	$6,008	$9,059	$5,847	$6,912	$8,185	$6,561	$5,792	$13526	$5,713

Table A5.9. Percentage of expenditures for core instruction, administrative support, and capital outlay in rural, small, and other school districts

	Total			Rural			Nonrural		
	Core Instruction	General Admin and Support	Capital Outlay	Core Instruction	General Admin and Support	Capital Outlay	Core Instruction	General Admin and Support	Capital Outlay
Total									
1989-90	61.2	25.6	13.2	58.7	28.0	13.3	61.5	25.2	13.2
1990-91	62.7	25.6	11.7	60.9	26.8	12.3	63.0	25.5	11.6
1991-92	62.8	25.8	11.4	60.8	26.7	12.4	63.1	25.7	11.2
1992-93	61.9	26.9	11.1	59.4	28.3	12.3	62.3	26.7	11.0
Small									
1989-90	56.9	28.8	14.3	56.8	29.1	14.1	57.5	27.1	15.4
1990-91	58.7	28.6	12.7	58.9	28.8	12.2	57.5	27.2	15.2
1991-92	59.0	28.7	12.3	59.1	28.9	12.0	58.3	27.7	14.0
1992-93	58.3	29.3	12.4	58.2	29.5	12.3	59.0	28.0	13.0
Large									
1989-90	61.3	25.5	13.2	59.2	27.6	13.1	61.6	25.2	13.2
1990-91	62.8	25.5	11.6	61.5	26.3	12.3	63.0	25.5	11.6
1991-92	62.9	25.7	11.4	61.4	26.1	12.5	63.1	25.7	11.2
1992-93	62.1	26.8	11.1	59.8	27.9	12.3	62.3	26.7	11.0

Table A5.10. Percentage of students in low, medium, and high per-pupil expenditure districts, by year

	Total			Rural			Nonrural		
	Low	Medium	High	Low	Medium	High	Low	Medium	High
Total									
1989-90	20.4	59.4	20.2	34.5	53.7	11.8	18.2	60.3	21.5
1990-91	22.5	57.0	20.5	34.3	53.2	12.5	20.7	57.5	21.7
1991-92	22.1	59.3	18.6	34.9	52.6	12.5	20.1	60.3	19.6
1992-93	23.4	57.9	18.7	33.0	55.4	11.7	22.0	58.3	19.7
Small									
1989-90	22.4	56.7	21.0	22.8	57.0	20.3	20.1	54.7	25.2
1990-91	20.9	58.4	20.7	21.0	59.0	20.0	20.5	54.7	24.9
1991-92	19.6	59.5	20.9	19.5	60.4	20.1	20.2	54.5	25.3
1992-93	19.7	59.4	21.0	19.3	60.4	20.3	21.8	53.4	24.8
Large									
1989-90	20.3	59.5	20.2	37.5	52.8	9.7	18.2	60.3	21.5
1990-91	22.6	56.9	20.5	37.7	51.7	10.6	20.7	57.5	21.7
1991-92	22.2	59.3	18.6	38.8	50.6	10.6	20.1	60.3	19.5
1992-93	23.5	57.9	18.6	36.4	54.1	9.5	22.0	58.3	19.7

Table A5.11. Student/teacher ratios in low, medium, and high per-pupil expenditure districts

	Total			Rural			Nonrural		
	Low	Medium	High	Low	Medium	High	Low	Medium	High
Total									
1989-90	18.5	17.8	15.3	17.4	15.6	13.5	18.8	18.2	15.5
1990-91	18.3	17.7	15.4	17.4	15.5	13.5	18.6	18.1	15.6
1991-92	18.5	18.0	15.6	17.4	15.7	13.9	18.8	18.3	15.8
1992-93	18.7	18.1	15.6	17.5	16.0	13.7	19.0	18.5	15.8
Small									
1989-90	14.5	13.4	11.1	14.4	13.2	11.3	15.7	14.7	10.6
1990-91	15.0	13.2	11.2	14.8	13.0	11.3	15.9	14.5	10.8
1991-92	15.1	13.5	11.4	14.9	13.3	11.5	16.8	14.9	10.9
1992-93	15.6	14.0	11.5	15.4	13.9	11.6	16.9	14.7	11.1
Large									
1989-90	18.7	18.0	15.5	17.9	16.5	15.1	18.9	18.2	15.5
1990-91	18.5	17.9	15.6	17.8	16.5	14.9	18.6	18.1	15.6
1991-92	18.6	18.2	15.8	17.8	16.7	15.4	18.8	18.3	15.8
1992-93	18.8	18.3	15.8	17.8	16.8	15.2	19.0	18.5	15.8

Appendix B. Technical Notes

Common Core of Data Analysis File Development

Source Files. The Common Core of Data (CCD) Local Education Agency (Nonfiscal) File has one record for each of about 16,000 "districts" each year. The basic data source for this report was the set of CCD files for the 8 years from 1986-87 to 1993-94.

Because there are a noticeable number (somewhat fewer than 2,000) records on the file that do not correspond to regular school districts, but rather to administrative entities (e.g., regional resource districts) concerned indirectly with elementary and secondary education, an extract of the "regular school districts" was made. This extract was based on a reported "district type," and two types out of seven were included in the extract. These were (1) "regular school districts" and (2) educational components of "supervisory union districts," which, where they exist in some states, are similar to regular school districts. Examination of the file led to the conclusion that in a few states and years, some districts were mistyped. In those cases, the type was made consistent over years to support more accurate analysis.

After deletion of 33 records for which there was no gradespan information in any year, there were 15,584 school districts on the analysis file; however, not all of these districts were operating in every year between 1986-87 and 1993-94.

Districts Added or Deleted Between Years. On the analysis file, 15,345 districts had data indicating that they were in operation in 1986-87, while only 14,648 were in operation in 1993-94. The vast majority of the districts on this file were in operation in every one of the 8 years studied. However, two facts are clear: (1) 239 districts were not present in 1986-87 but were for some later year, and (2) there were 697 fewer districts in 1993-94 than there had been in 1986-87. This reflects the dynamic nature of the local governance structure for public education. Declining populations in some areas led to pressures to consolidate (combine) districts to reduce administrative overhead, and rising populations in other areas led to pressures to split large districts and create new administrative units.

Between one year and the next, the most frequent school district change was the consolidation of two (or more) districts into a single district. Sometimes, these consolidations combined elementary and secondary districts into unified districts; more frequently they consisted of the closure of a small district and transfer of its students to another nearby district. In some cases, a district simply absorbed the enrollment of an adjacent district but continued its existing identity; in others both component districts were replaced with the creation of a new consolidated district with a new identity. Because the linkage of each district to its predecessors was not explicitly recorded in the Common Core of Data, it is difficult from these data to differentiate between new districts created from consolidations and new districts created from the splitting of a large district.

"New" Districts Resulting from Consolidations or Splits. In order to understand the dynamics of districts, it is important to distinguish between "new" districts that are combinations of previous districts and "new" districts that are spin-offs from existing districts that have grown.

Therefore, an attempt was made to pair each district that newly appeared on the file in a particular year with a district in the same county that closed after the preceding year. To do this, for every district that closed in a year, a district was sought that either newly appeared the next year or otherwise added an appropriate number of students. Because CCD does not uniformly delete districts from the file in the first year after they close, districts were considered to have closed for the purpose of this study if they dropped from an enrollment of 25 or more to an enrollment of 0 and did not add enrollment in a later year.

Of course, enrollments change from year to year, but large discontinuities of enrollment can be matched. For example, if a district with 83 students in 1988-89 closed and the enrollment in another district in the same county increased from 255 to 326 between 1988-89 and 1989-90, it would be reasonable to conclude that the latter district inherited the students of the former district. Through trial implementations of this procedure, it was determined that transfer of enrollments of fewer than 25 students could not be reliably detected in this manner, because the addition of fewer than 25 students would not be so unusual as to be noticeable as a discontinuity.

Most consolidations involving transfer of 25 or more students from a closing district were identified. From the identifications made, we know that most new districts were created out of consolidations during this period: overall, 128 "new" districts were created when 237 districts consolidated; 286 districts were folded into other districts, but only 6 districts were identified as resulting from the splits of 3 districts. Thus, it is reasonable to conjecture that most "new" districts in this time period were created through consolidations. However, the identification process was incomplete. Across the 7 years, a total of 106 "new" districts could not be unambiguously paired based on enrollment discontinuities. Moreover, it was impossible to identify where students from districts with fewer than 25 enrollment moved when their districts closed.

Because the matching of "new" districts to predecessors was incomplete, it was impossible to produce separate reliable counts of "new" districts created from consolidations and from splits. Therefore, for this report, districts referred to as "new" or "opening" include both types, although nearly all are probably created from the consolidations of other districts. Very few districts, perhaps only a handful, split to form new districts during this 7-year interval.

Definition of Variables

District Locale ("Rural"). Because information was not available from the 1990 Census when this report was being prepared, information from the 1980 U.S. Census was used to classify the locales of addresses of schools for CCD during the 1980s (and for this report) as rural, small or large town, or fringes or central areas of mid-size or large cities. The CCD *school* locale codes are used in this report to define *districts* as "rural." Specifically, according to the standard CCD definition, the district locale code is set to the modal school locale code for schools in the district. A rural school district is defined as a district in which the most frequent school locale code is "7" (i.e., rural). All other districts are defined as "not rural."

Examination of the results of this categorization led to a finding that the locale codes recorded in CCD for schools in two states were inconsistent. Therefore, in these two states, the

Common Core of Data (CCD) definition of rural districts was checked against other data sources. These data sources included the locale code of a district based on Census population counts by school district from the School District Data Book (SDDB) and the locale code of a county based on the location classification from U.S. Department of Agriculture's Economic Research Statistics (ERS) data. A set of rules were developed to determine whether a district in these two states was rural or nonrural. Since these sources used data from 1990, the rules were applied to the districts in the 1990-91 school year of the CCD. Based on these data checks, CCD rural classifications of 491 out of 15,035 districts were changed for this report: 314 districts originally called nonrural were relabeled rural, and 179 were changed from a rural to a nonrural label.

District Size ("Small"). A small district (as well as a small school) is defined as a district that had a total enrollment of fewer than 25 students per grade for grades 8 and lower that it served, and fewer than 100 students per grade for grades 9 and above. The enrollment that was used for this classification was for 1987-88 or for its first year on the CCD file if it was not on the file for 1987-88. Thus, for example, characteristics of small rural districts in 1993-94 are the characteristics in 1993-94 of districts that were categorized as small in 1987-88.

Of course, these are essentially the same districts that had small enrollments in 1993-94. Of 4,238 small rural districts counted in 1993-94 (based on the 1987-88 definition), 4,003 were still small in 1993-94, and only 17 (0.4 percent) had 1993-94 enrollments more than 50 percent over the threshold. Only one "outlier," a district that merged with a large nonrural district in 1988-89 but retained its identity on the file, had a 1993-94 enrollment more than 3 times the threshold: a K-8 district with 1,281 students in 1993-94. To balance these districts, 91 of the 9,596 districts not categorized as small based on 1987-88 enrollments had small enrollments in 1993-94, but only 7 of these had enrollments less than 70 percent of the threshold, and 5 of the 7 had enrollments of zero, indicating that they would probably be verified as closures in 1994-95. These few exceptions could only have slight effects on population summary statistics.

Because any particular definition of "small rural districts" might not accurately reflect the general intuition about what education in small rural areas in America might be, two alternative definitions were considered, and parallel sets of analyses were conducted to determine the sensitivity of the findings in this report to the definition of "small." The numbers of additional "small rural" districts added to the original count in each state by these expansions of the definition of small are shown in table B1.

Including all large rural districts with a majority of small schools. First, the finding that there were no small rural districts in Alabama, Louisiana, and West Virginia led to an examination of the CCD characteristics of (large) rural districts in these states. Several of the large rural districts in these and other states operated mostly small schools (i.e., schools with fewer than 25 students per elementary grade and 100 students per secondary grade), and in a sense, these "large rural districts with a majority of small schools" also represent small rural education in America. Therefore, in addition to the main analyses, parallel analyses were carried out for an expanded definition of small rural district, including these districts.

The results from the first set of parallel analyses, including the 254 large rural districts with

a majority of small schools in the set of small rural districts, are mentioned in footnotes at the end of each chapter. Generally, because these districts constituted only a small fraction of the small rural districts, nationally, there were only small differences in the findings.

Including all unified districts with fewer than 100 students per high school grade. Second, one can argue that unified (K-12) districts with enough students to qualify as large at the elementary level (i.e., more than 25 students per elementary grade) but not enough to qualify as large at the secondary level (i.e., fewer than 100 students per secondary grade) should be considered small. Therefore, a second set of parallel analyses was also carried out, including unified districts with fewer than 100 students per secondary grade in the definition of small districts.

Counting unified districts with fewer than 100 students per secondary grade as small had a substantial impact on results. The number of small rural districts in 1993-94 increased from 4,238 to 5,595; with this criterion, 80 percent of the regular public school districts in rural locales would be categorized as small. Moreover, because the additional "small" rural districts had greater enrollments than those originally counted as small, the average enrollment in small rural districts by the expanded definition was about 440, rather than 260. There were 12,000 schools and 2,460,000 students in small rural districts in 1993-94 by the expanded definition. Between 1986-87 and 1993-94, the overall gain in enrollment in small rural districts became 110,000 students, rather than 8,000.

The region of the country in which the percentage change in districts counted as small rural was greatest was the Southeast, where instead of 16 small rural districts, 110 small rural districts were counted. Across the country, more minorities were enrolled in small rural districts by the expanded definition. For example, 4 percent of students in small rural districts were African American, rather than 2 percent; and 18 percent of Native American students, rather than 10 percent, were enrolled in small rural districts.

As a general pattern, this expansion of the definition of "small" changed findings for small rural districts by averaging characteristics of large rural districts with them. For example, small rural districts became more like other districts in the relative frequency of unified (K-12) districts (73 percent, rather than 65 percent, compared to 76 percent in other districts). As another example, the percentage of small rural districts' revenues from local sources shifted from 44 percent to 42 percent, closer to the original 38 percent for large rural districts. Finally, the average student/teacher ratio in small rural districts was shifted from 13:1 to 15:1, closer to the average of 17:1 for large rural districts.

A noticeable shift in patterns of per-pupil revenue and expenditures resulted from the expanded definition of small rural districts: rather than spending on average $200 more than large nonrural districts, the larger set of small rural districts were found to spend $100 less. Although these are not large differences, compared to the overall average of about $6,000 per pupil, the shift is significant. Although regional variations in revenues and expenditures followed similar patterns, the increased number of small rural districts in the Southeast provided greater assurance that the averages are reliable. In the Southeast, per-pupil revenue and expenditures in the expanded set of 110 small rural districts averaged about $100 less than in other districts in the region, but between 1989-90 and 1992-93 there was a gain of $246 in per-pupil expenditures in small rural districts in the Southeast.

Table B1. Number of small rural districts, large rural districts with a majority of small schools, and large rural districts with small secondary enrollments in 1993-94, by state

	Small rural	Large rural with a majority of small schools	Large Rural but Small 9-12
50 States and D.C.	4,238	254	1,357
Alabama	0	5	0
Alaska	37	7	7
Arizona	55	4	10
Arkansas	132	3	61
California	147	16	15
Colorado	89	1	21
Connecticut	10	2	4
Delaware	0	2	0
District of Columbia	0	0	2
Florida	0	3	2
Georgia	3	1	18
Hawaii	0	0	0
Idaho	44	5	22
Illinois	203	22	83
Indiana	6	2	52
Iowa	196	5	73
Kansas	161	21	55
Kentucky	6	2	15
Louisana	0	5	0
Maine	82	0	18
Maryland	0	0	0
Massachusetts	6	1	1
Michigan	80	3	79
Minnesota	156	8	72
Mississippi	2	12	18
Missouri	253	9	86
Montana	369	1	0
Nebraska	484	3	9
Nevada	3	5	2
New Hampshire	45	2	8
New Jersey	21	1	2
New Mexico	37	1	10
New York	97	2	70
North Carolina	0	1	6
North Dakota	217	2	12
Ohio	23	9	97
Oklahoma	294	3	42
Oregon	91	2	6
Pennsylvania	5	2	33
Rhode Island	1	0	0
South Carolina	2	0	9
South Dakota	130	9	18
Tennessee	1	12	10
Texas	389	5	136
Utah	5	4	5
Vermont	141	0	3
Virginia	2	5	11
Washington	107	3	43
West Virginia	0	6	3
Wisconsin	94	30	99
Wyoming	12	7	9

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District Grade Level: Elementary/Unified/Secondary. An elementary school district is defined as a district that has no grade above grade 8, a secondary school district is a district that has no grade below 7, and a combined or unified school district is a district that has some grade below grade 7 and some grade above grade 8.

District Type. Seven types of districts are included in CCD, but analyses are limited to "regular" districts, those of types 1 and 2. Other types of districts are omitted from the analyses, because they are very different from other small rural districts and very few in number. These include regional education service agencies, administrative components of supervisory unions, and state-operated agencies. Devoting a portion of the report to their analyses would detract from the main points of the report.

Geographical Regions.

Northeast:	Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont
Midwest:	Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin
Southeast:	Alabama, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia
South Central:	Arkansas, Oklahoma, Texas
West:	Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

School Grade Span. School grade spans were defined slightly differently from district grade levels. Listings of all the regular school grade ranges from the 1987 CCD indicated that there was at least one school in nearly every possible grade span category. The classification schema below (see figure B1) was developed to categorize every possible combination, including an intermediate school category consistent with the philosophy of most intermediate school advocates. It includes the following grade level categories:

1) Elementary school
2) Intermediate school
3) High school
4) Combined school
5) Ungraded or Unknown

Figure B1. Schema for classification of schools by grades served

	PK	K	1	2	3	4	5	6	7	8	9	10	11	12
PK	E	E	E	E	E	E	E	E	E	E	C	C	C	C
K		E	E	E	E	E	E	E	E	E	C	C	C	C
1			E	E	E	E	E	E	E	E	C	C	C	C
2				E	E	E	E	E	E	E	C	C	C	C
3					E	E	E	E	E	E	C	C	C	C
4						E	E	E	I	I	I	C	C	C
5							E	E	I	I	I	C	C	C
6								E	I	I	I	H	H	H
7									I	I	I	H	H	H
8										I	I	H	H	H
9											I	H	H	H
10												H	H	H
11													H	H
12														H

NOTE: E=Elementary; I=Intermediate; H=High; C=Combined. Low grades are on the diagonal; high grades are listed on top.

That is, an elementary school has a high grade of 6 or lower or a combination of a low grade less than 4 and a high grade of 8 or lower; an intermediate school has a low grade of 4 or higher and a high grade of 7, 8, or 9; a high school has a low grade of 6 or higher and a high grade of at least 10; a combined school has a low grade of 5 or lower and a high grade of at least 10, or a low grade of 3 or lower and a high grade of 9. Other schools are classified as unknown or ungraded.

School Size. Schools were classified as "small" according to the same threshold as districts. Small schools were schools with total enrollment less than 25 per elementary (K-8) grade served and 100 per secondary (9-12) grade served.

School Type. The CCD type codes are used for this purpose. They are:

1) Regular school
2) Special education school
3) Vocational education school
4) Alternative education school

District Per-Pupil Revenues. Data from F-33 on revenues from local, state, and federal sources are used. Percentages are extracted from the CCD CD-ROM or equivalent files. For CCD, revenue is an increase in the net current assets of a government fund type from other than expenditure refunds and residual equity transfers. Revenues are reported from local, intermediate, state, and federal sources. Per-pupil revenues are weighted by enrollment in computing national averages.

District Per-Pupil Expenditures. Data from F-33 on expenditures for instruction and for other operations are used. Percentages are extracted from the CCD CD-ROM or equivalent files. For CCD, current expenditures include the categories of instruction, support services, and non-instructional services that include fixed charges (employee benefits, rent, interest). They do not include debt service and capital outlay. Instructional expenditures include those for activities dealing with the interaction between students and teachers (salaries, including sabbatical leave, employee benefits, and purchased instructional services). Per-pupil expenditures are weighted by enrollment in computing national averages.

Very Small Schools. For this report, small schools with fewer than one teacher per grade were called very small schools.

Longitudinal Editing and Imputation of CCD Data

The Common Core of Data relies on state-level aggregation of district information and transmission to NCES. In that process, there are occasions for errors in interpretation by respondents and errors of data entry. It is impossible to identify many errors because the resulting figures, by themselves, appear to be reasonable. However, when data from 8 years are merged, it is possible to make much more precise identification of errors. For example, a district whose reported enrollment pattern over 8 years is (375, 390, 365, 40, 415, 420, 410, 430) can be assumed to have a data entry error in the fourth year—an enrollment of about 400 would be a reasonable estimate for that year. In preparing this CCD longitudinal report on small rural school districts, extensive editing and imputation were undertaken. The specific steps are described in this section. Chronologically, the 1986-87 through 1991-92 data were edited and imputed simultaneously, and the 1992-93 and 1993-94 data were subsequently imputed using the values from the preceding years. The editing and imputation was performed in the following 15 steps.

Step 1. Specify the records to be included. Identify school districts that change type from regular to nonregular and back, and set the type to be constant. Reported types of some districts in Maine, Massachusetts, California, Ohio, Virginia, and Vermont were changed in some years. (For one LEA on the Mississippi River whose state did not match its identification code, the variable

STATE was changed.) Also, if any district has no students, no teachers, and no schools, and does not merge with any schools on the school file, in any year, delete it from the file. This step determines the number of district records on each year's file.

Step 2. YEARS. Create YEARS, a string with one character for each year: "Y" if the district is on the district file and merges with at least one school on the school file in the year, "N" if the district is on the district file but merges with no schools on the school file in the year, and "M" if the district is not on the district file in the year.

Step 3. Number of schools. If the number of schools is missing for a district for a year, use the number from a preceding year with data. If the number is not available for any year, use the number of records on the school file for the district. (If none, set the number of schools to zero.)

Step 4. Grade span. If high grade and low grade are missing for a year, use the previous or closest year if some year has data. Otherwise, impute from school file. If the school file grade span is indeterminate, but there is a school, impute KG-to-12. Otherwise (if there is no school), impute as missing. Edit gradespans to remove cases in which low grade is higher than high grade—set them equal to whichever is not imputed, or if neither is, to the lower of the two.

Step 5. Number of teachers. Set spurious zeros for numbers of teachers (in Massachusetts and Michigan in 2 years) to missing. If number of teachers is missing in a district for a year, use the sum from the school file if there is a match. Otherwise, use a prior year's count, or if no teacher counts are available for any year, impute a value equal to the product of the number of schools times the number of grades in the gradespan (i.e., one teacher per school per grade). If the gradespan is indeterminate, impute one teacher per school.

Step 6. Edit number of students. Replace zero or missing values for enrollment in a district, or values that differ from an adjacent year by both 40 and 40 percent, with positive values from the school file whenever available. Note that when single years were added to the file later (i.e., 1992-93 and 1993-94), this step was repeated.

Step 7. Edit student/teacher ratio. Remove large or inconsistent student/teacher ratios (S/T). If for some year, a district's S/T is greater than 50 or S/T is "inconsistent" with both of the 2 adjacent years (by a factor of 2 or more), and the adjacent years are consistent with each other, then either set S to missing (to be imputed) or impute T directly. If S is consistent with adjacent years but T is not (each by a 40 percent factor), impute T as the average of the two years it is adjacent to. Otherwise set S to missing. One district, new in 1991-92, has number of teachers imputed from 1992-93, because its number of teachers in 1991-1992 created a student teacher ratio greater than 700.

Step 8. Impute number of students. Run PROC IMPUTE to impute total students in the 6 years. The imputation is BY two categories of number of schools (districts with fewer than 4 schools and districts with 4 to 19 schools). No districts with more than 20 schools were missing total enrollment. The average number of schools and average number of teachers were used in PROC IMPUTE.

Step 9. Racial-ethnic percentages. This step imputes ethnic distributions. First, the SDDB (1990 decennial Census, mapped onto school district boundaries) is used to obtain percentages of each district's child population in different ethnic groups. For 27 districts for which no ethnic data are available for any year on the CCD or for the SDDB, impute the average for districts in the same city, or if not available, from the same county. For districts with data in some years but not others, perform the edit check described below, then use PROC IMPUTE. (However, no ethnic data were available for 1986-87, and none were imputed. Ethnic distributions for that year are not included in the report.)

Set inconsistent values to missing. These are values for districts that have values for at least 3 different years, and at least one of the percents differs from the average of all years by both (a) at least 25 percentage points and (b) at least 5 standard deviations. Also, for convenience, set the percentages for districts with zero students to the national averages: 1.1, 6.1, 5.4, 2.2, 85.2, for Asian, black non-Hispanic, Hispanic, Native American, and white non-Hispanic, respectively. Run PROC IMPUTE with the 20 variables (four ethnic groups (excluding white non-Hispanics) for each year from 1987-88 through 1991-92). An additional run using all years' data, but only imputing the last 2 years, was made to impute missing values for 1992-93 and 1993-94.

If the resulting sum of the minority percents is greater than 100 for any district, they are normalized to 100. The white non-Hispanic percentage is set to 100 minus the sum of the other percentages in all districts.

Step 10. Locale code. For districts with schools with locale codes, the NCES standard procedure for deriving district locale codes from school locale codes was used. That procedure assigns the most frequent school locale code in the district, setting ties to the more urban local, with the possible exception that for districts in which at least three-fourths of the schools have locales spread among values of 1, 2, 3, or 4 (i.e., in metropolitan areas) but the most frequent single school locale is 5, 6, or 7 (i.e., large or small town or rural), the district locale would be set to the most frequent of the values 1, 2, 3, or 4. (That exception did not occur in these data.)

For districts with no locale code in any year, the most frequent locale code for districts in the same county was used. If no data were available for the county, (a) the value 2 was imputed if the metro status code was 1; otherwise, if the number of schools was less than 5, the value 7 was imputed. If the metro status code was 2 and there were 5 or more schools, the value 3 was imputed; and if the metro status code was 3 and there were 5 or more schools, the value 6 was imputed. These rules are based on minimizing the percent errors based on relations observed for districts with data. Although the locale code was imputed separately by year, imputed values for a district were forced to be constant across years, equal either to the latest unimputed value or, if there were no unimputed values, to the modal value.

Step 11. Percent of school-aged children in poverty. (This variable was taken from the SDDB. It was therefore missing for all CCD districts not present in the SDDB.) The average percent poverty for districts in the same county was used to impute percent poverty. If there were no districts in a county with data, the average value 17 percent was used.

Step 12. Counts of special education students. First, counts in all districts in states which reported uniform zeroes in a year were set to missing, to be imputed. Second, if the number in a district exceeds the total number of students for a district, it was imputed to be equal to the total number of students.

Counts were then translated to fractions of total enrollment, and two variables were created—the average fractions for 1987-88 and 1988-89, and the average fractions for later years. Two averages were used because the values in the earlier years were not highly correlated with the values in later years. PROC IMPUTE was run, with five special education percentages (one for each year from 1987-88 through 1991-92), the two overall averages, and the percent of enrollment that was black non-Hispanic, plus Native American, minus Asian. It was run with separate hot deck distributions depending on whether there was a determined gradespan. These variables were selected on the basis of regression model results. Imputed percentages were translated back into counts.

Step 13. Four types of high school completers. Data were only available for the years after 1986-87, and the high school equivalence results were not available for 1991-92. First, values for 12th grade enrollment were imputed (and later dropped), in order to impute graduates as a ratio to the preceding year's 12th graders. Imputation of 12th grade enrollment occurred if the number of 12th graders was either missing, larger than the total enrollment, or less than half of the total completers (the sum of four fields: regular diplomas, plus other diplomas, plus other high school completers, plus high school equivalencies).

If the grade span was reasonable, the value of the total enrollment divided by the number of grades was used for 12th grade enrollment. Otherwise, if there was a 12th grade and the number of completers was greater than zero, the grade 12 enrollment was set equal to the completers. If 12th grade was not offered or the number of completers was zero, count of 12th graders was imputed to be zero.

A small number of erroneous values for high grade in 1986-87 were set to 12. These were cases in which there were 12th graders enrolled and completers the next year but for which high grade was less than 12. Counts of completers were transformed to ratios to preceding years' 12th graders.

PROC IMPUTE was run after the file was prepared. Variables included were average ethnic percentages and percent in poverty, as well as the average over years of each of the four categories of completers. The latter averages, which normally would be no greater than 1, unless there was substantial in-migration, were not allowed to exceed 2. Values of percentage of 12th graders who earned regular diplomas that differed from the average (across years) by more than 50 percentage points and values of other completion types that differed by more than 20 percentage points from the average were set to missing. Hot deck distributions were selected separately for three sizes of 12th grade cohorts: <20, 20 to 99, and 100 or more. The results were transformed back to counts, and three districts new in 1991-92 were separately imputed to have no completers.

Step 14. All imputed counts on the file were rounded to integers.

Step 15. Impute Per-Pupil Revenues and Expenditures. In addition to variables on the CCD nonfiscal survey file, two variables on the F-33 Census of Governments survey, total revenues and expenditures per pupil, were imputed for the four school years from 1989-90 through 1992-3. For nearly every regular school district, data were present for at least one of the four years. Districts with data in none of these years (n = 90) were imputed as the average value of per-pupil revenues and expenditures for districts reporting data in the specified year, by category. The categories for which separate mean values were computed in each of the four years were large and small districts in rural and nonrural settings in each of the four standard geographic regions. (The division of the south into two subregions used elsewhere in this report was not applied to this imputation.)

For all imputations, the first step was to compute mean values of per-pupil revenues and expenditures for the 11,729 regular districts with F-33 data in all four of the school years (1989-90 through 1992-93). The mean values for per-pupil revenues and expenditures were obtained for each of four regions, separately for small and large rural and nonrural districts in each year (a total of 128 numbers). Means were weighted by the F-33 estimate of enrollment in the year.

Next, for each pair of adjacent years, a linear regression function was estimated, using a single predictor (the same measure in the adjacent year), to predict the deviation of a district's per-pupil revenues or expenditures from the mean for that district's region and size and locale category. A total of 12 regressions were estimated (3 pairs of adjacent years, in each order, for revenues and expenditures). The regressions were weighted by the F-33 estimate of enrollment in the year being predicted. Then, for cases missing in a year, the value was imputed as the sum of (a) the mean value for the region by size by locale category for that year and (b) the estimated deviation from the mean based on the regression.

The percentages of data that were imputed for this report range from 0.0 percent to 47.7 percent, as shown in table B2. Except for race and special education counts in the earlier years, none of these percentages were as great as 20 percent. Although these percentages primarily represent missing data, some imputed values are the result of setting unreasonable reported values to missing. As a general rule, most imputed values were based on reported values for the same district in different years, using the rules summarized above. It should be noted that these percentages pertain only to regular school districts, as used in this report. Between 1,000 and 2,000 other entities are included in the Common Core of Data public school district release file.

Table B2. Percentages of values imputed on the district files used in the small rural districts report

Variable	Year 1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Small rural districts								
Gradespan	0.3	0.6	0.4	0.2	0.3	0.9	0.6	0.5
No. of Schools	0.0	0.3	0.2	0.1	0.0	0.0	0.0	0.0
No. of Teachers	3.1	2.8	11.8	0.6	2.6	3.2	8.0	3.9
No. of Students	21.7	0.5	0.3	0.2	0.5	0.4	0.3	0.2
Race (Low/High)	--	25.-40.	22.-34.	20.-28.	14.3	8.8	4.0	1.8
Special Ed Count	--	40.7	29.7	26.0	31.3	13.3	1.8	2.6
Locale	4.3	4.0	3.1	1.8	0.9	0.2	0.0	0.0
Per-Pupil Revenue	--	--	--	3.9	26.1	1.6	15.7	--
Per-Pupil Expenditure	--	--	--	3.9	26.2	1.5	15.8	--
All districts								
Gradespan	0.6	0.4	0.3	0.2	0.3	0.6	0.4	0.3
No. of Schools	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0
No. of Teachers	6.4	7.7	13.9	2.6	5.8	6.6	5.7	2.1
No. of Students	19.4	0.5	0.2	0.1	0.3	0.2	0.2	0.1
Race (Low/High)	--	26.-36.	16.-25.	12.-18.	10.9	7.6	5.1	2.4
Special Ed Count	--	47.7	35.0	23.1	30.4	15.7	10.2	6.4
Locale	3.5	3.4	2.8	1.7	1.1	0.1	0.0	0.0
Per-Pupil Revenue	--	--	--	2.9	15.7	1.3	12.6	--
Per-Pupil Expenditure	--	--	--	2.9	15.7	1.3	12.6	--

Notes: -- Indicates that the measure was not included in this report for the particular year.
Percentages of race/ethnicity imputation, unlike other measures, are for schools.

Three of the entries for race/ethnicity in table B2 represent a range. Before 1990-91, there were different percentages of missing data for different race/ethnicities, ranging from a low for white non-Hispanics to a high for Native Americans. District level race/ethnicity percentages were obtained by summing the percentages for schools in the district, with appropriate weights. However, there were a few districts with no school data. Therefore, in addition to the values imputed at the school level shown in table B2, small percentages of race/ethnicity distributions were imputed at the district level. These percentages were for 0.9, 1.0, 0.4, 0.5, 0.1, 0.2, and 0.3 percent of the districts in the years from 1987-88 through 1993-94, respectively.

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